

NANYANG TECHNOLOGICAL UNIVERSITY

SEMESTER 2 EXAMINATION 2012-2013

BU8241 – Money 101

May 2013

Time Allowed: 2 hours

INSTRUCTIONS

- 1 This paper contains **FIVE(5)** questions and comprises **SIX(6)** pages and **ONE(1)** Appendix of **FOUR(4)** pages.
 - 2 Answer **ALL** questions.
 - 3 The number of marks allocated is shown at the end of each question.
 - 4 Shade your answers to the multiple-choice questions in Section A on the Scantron sheet. Use only 2B pencils and erasers. Complete the front page of the Scantron sheet as follows:
 - (a) Write your Subject Title as Money 101.
 - (b) Write your Subject Code as BU8241.
 - (c) Write clearly your Seat Number.
 - (d) Write the date of the examination clearly.
 - (e) Write and shade your MATRICULATION NUMBER in the box provided for matriculation number. Read the examples shown and ask for clarification if you have any doubt.
 - 5 Begin your answer to each question in Section B on a separate page of the answer book.
 - 6 Answers in Section B will be graded for content and appropriate presentation.
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Section A

Question 1

This question consists of **SIXTEEN(16)** multiple choice questions. Choose the correct answer from the alternatives given. In your **SCANTRON SHEET**, shade the correct answer (A), (B), (C), (D), or (E) next to the question number. Each multiple-choice question carries one and a half (1.5) marks.

Note: Question No. 1 continues on page 2

Question 1 (continued)

- (1) Who is *most likely* to benefit from inflation?
- (A) Lenders
 - (B) Couples with small children
 - (C) Young people
 - (D) Borrowers
 - (E) Retired people
- (2) Suppose you borrow \$10,000 with a 12% interest rate per annum, compounded monthly. The loan is to be repaid in monthly payments for 2.5 years (30 months). The amount of each payment would be closest to:
- (A) \$ 3,600
 - (B) \$ 530
 - (C) \$ 387
 - (D) \$ 130
 - (E) \$ 20
- (3) Which one of the following people *does not* have to file for Singapore income tax?
- (A) A Singaporean housewife who earns part-time income \$24,000 a year.
 - (B) A college student.
 - (C) A person earning \$19,000 a year.
 - (D) A person over age 65.
 - (E) Statements (C) and (D) are correct.
- (4) If you are denied credit, your first step should be to:
- (A) Increase your income and decrease your spending.
 - (B) Reapply for credit.
 - (C) Require an explanation of the credit denial from the creditor and try to negotiate.
 - (D) Hire an attorney and file a suit against the creditor.
 - (E) Check your credit file at the consumer bureau.
- (5) What is the signal of potential debt problems?
- (A) Complaint about the debt outstanding.
 - (B) Paying only some amount of credit card balance last month.
 - (C) Using savings to pay normal bills for the last 3 months.
 - (D) Statements (B) and (C) are correct.
 - (E) Statements (A), (B) and (C) are correct.

Note: Question No. 1 continues on page 3

Question 1 (continued)

- (6) Jerry Doubt is pricing DVD player in several stores. Two stores, A and B, have identical DVD player price of \$320. Each store charges 15 percent APR. Jerry starts the month with a balance on his credit card of \$1,000. On the 10th day of the month, he purchases a DVD player for \$320 with his credit card. On the 15th day of the month he makes a payment on his credit card of \$600. Assume that store A and B calculate financial charge by using the average daily balance method (including new purchase) and the adjusted balance method, respectively. What would the difference of Jerry's finance charge between purchasing from store A and B be for the month, i.e., what is financial charge of store A- financial charge of store B?
- (A) \$2.42
(B) \$6.42
(C) \$11.42
(D) \$16.42
(E) \$18.00
- (7) The purpose of a service contract is to:
- (A) Protect a product owner from expensive repairs.
(B) Promote good relationship between the seller and its customers.
(C) Prevent legal action due to a defective product.
(D) Attain regular maintenance on a product.
(E) Statements (A) and (C) are correct.
- (8) Which of the following statements is a purpose of zoning laws?
- (A) Restrict property use.
(B) Reduce real estate property taxes.
(C) Preserve the character and stability of the community.
(D) Statements (A) and (C) are correct.
(E) Statements (A), (B) and (C) are correct.
- (9) Which of the following is the *best* way to reduce your personal healthcare costs?
- (A) Considering a high benefit health plan
(B) Asking for less expensive generic drugs
(C) Buying health medicine
(D) Buying medicine from big shops
(E) Statements (A) and (B) are the best ways.
- (10) What is the assumption of the DINK method of life insurance?
- (A) Your insurance needs are complex.
(B) Your spouse will continue to work after your death.
(C) You have only two children.
(D) Your spouse has income more than \$20,000 a year.
(E) There must be at least 4 members in your household.

Question 1 (continued)

- (11) Pricia Tan wants to invest in a stock that is relatively safe, suitable for conservative investors and generally issued by a well-established and financially sound company. What type of stock best fits Pricia's requirements?
- (A) Large cap stock
 - (B) Small cap stock
 - (C) Growth stock
 - (D) Blue-chip stock
 - (E) Cyclical stock
- (12) What is the major reason investors purchase mutual funds?
- (A) Diversification.
 - (B) High rate of return.
 - (C) Professional management.
 - (D) Statements (A) and (C) are correct.
 - (E) Statements (A), (B) and (C) are correct.
- (13) Which of the following statements is most CORRECT?
- (A) Bond ratings provide quality and risk associated with bond issues.
 - (B) Moody's Investor Service Inc., Standard Charter Corporation, and Fund ratings provide bond ratings.
 - (C) Ratings generally range from AAA to E.
 - (D) High grade bonds include AAA and BBB rated bonds.
 - (F) Statements (A) and (C) are correct.
- (14) Which of the following real-estate investments provides some diversification?
- (A) A piece of raw land.
 - (B) A second mortgage.
 - (C) An executive condominium.
 - (D) A bungalow.
 - (E) A real estate investment trust (REIT).
- (15) Which of the following statements is NOT CORRECT about the retirement planning?
- (A) Possible sources of income for retirees include Central Provident Funds and employer pension plans.
 - (B) One step of the retirement planning is analyzing the person's current assets and liabilities.
 - (C) Retirees should not plan to increase income by working part-time due to their old age and weaker health.
 - (D) CPF Lifelong Income scheme For the Elderly (CPF LIFE) provides Permanent Residents and Singaporeans a monthly income for about 20 years or lesser.
 - (E) Statements (C) and (D) are not correct.

Note: Question No. 1 continues on page 5

Question 1 (continued)

(16) Under which of the following condition should you review your 'will'?

- (A) The size and composition of your estate have changed.
- (B) You have been promoted to higher level.
- (C) The economic factors change.
- (D) Your relatives have married, divorced or remarried.
- (E) All of the above are correct.

(TOTAL: 24 marks)

Section B

Question 2

(a) Why is opportunity cost an important concept in money management? Explain.

(6 marks)

(b) A couple, Linda and Steven Wong, just got married. They are planning to buy a car. However, they do not know what procedure they should start with. You, as their friends, have an experience of purchasing a car. What would you advise them?

(10 marks)

(TOTAL: 16 marks)

Question 3

(a) Define five of these six terms:

- (A) Asset allocation
- (B) Preferred stock
- (C) Dividend payout
- (D) Speculative investment
- (E) Serial bond
- (F) Zero-coupon bond

(10 marks)

(b) What factors should you consider (as a financial checkup) before you make your first investment?

(10 marks)

(TOTAL: 20 marks)

Question 4

Martin Lam has saved \$20,000 and wants to invest in common stocks.

- i. Identify four investment techniques he could use and explain how each of those techniques works.
- ii. If he wants a broker to buy stocks for him, should he use a discount broker or full service broker?
- iii. Provide him with the description of the characteristic of the following stocks:
Cyclical stock, defensive stock, growth stock, income stock, large cap stock and small cap stock.

(TOTAL: 20 marks)

Question 5

Elina is 55 years old and a university librarian. She was suddenly widowed when her husband, Ricky, died unexpectedly. Ricky handled all of their financial matters. However, both of them never had a formal financial plan and did not understand why it is important to plan for retirement. After Ricky died, Elina was thrown into a state of grief and confusion. She would like you to answer her questions:

- i. Why is retirement planning important?
- ii. What should she consider for retirement planning? What are the options available to her to have enough money to spend during the retirement period?

(TOTAL: 20 marks)

- END OF PAPER -

APPENDIX 1

Exhibit 1-A Future value (compounded sum) of \$1 after a given number of time periods

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%
1	1.010	1.020	1.030	1.040	1.050	1.060	1.070	1.080	1.090	1.100	1.110
2	1.020	1.040	1.061	1.082	1.103	1.124	1.145	1.166	1.188	1.210	1.232
3	1.030	1.061	1.093	1.125	1.158	1.191	1.225	1.260	1.295	1.331	1.368
4	1.041	1.082	1.126	1.170	1.216	1.262	1.311	1.360	1.412	1.464	1.518
5	1.051	1.104	1.159	1.217	1.276	1.338	1.403	1.469	1.539	1.611	1.685
6	1.062	1.126	1.194	1.265	1.340	1.419	1.501	1.587	1.677	1.772	1.870
7	1.072	1.149	1.230	1.316	1.407	1.504	1.606	1.714	1.828	1.949	2.076
8	1.083	1.172	1.267	1.369	1.477	1.594	1.718	1.851	1.993	2.144	2.305
9	1.094	1.195	1.305	1.423	1.551	1.689	1.838	1.999	2.172	2.358	2.558
10	1.105	1.219	1.344	1.480	1.629	1.791	1.967	2.159	2.367	2.594	2.839
11	1.116	1.243	1.384	1.539	1.710	1.898	2.105	2.332	2.580	2.853	3.152
12	1.127	1.268	1.426	1.601	1.796	2.012	2.252	2.518	2.813	3.138	3.498
13	1.138	1.294	1.469	1.665	1.886	2.133	2.410	2.720	3.066	3.452	3.883
14	1.149	1.319	1.513	1.732	1.980	2.261	2.579	2.937	3.342	3.797	4.310
15	1.161	1.346	1.558	1.801	2.079	2.397	2.759	3.172	3.642	4.177	4.785
16	1.173	1.373	1.605	1.873	2.183	2.540	2.952	3.426	3.970	4.595	5.311
17	1.184	1.400	1.653	1.948	2.292	2.693	3.159	3.700	4.328	5.054	5.895
18	1.196	1.428	1.702	2.026	2.407	2.854	3.380	3.996	4.717	5.560	6.544
19	1.208	1.457	1.754	2.107	2.527	3.026	3.617	4.316	5.142	6.116	7.263
20	1.220	1.486	1.806	2.191	2.653	3.207	3.870	4.661	5.604	6.727	8.062
25	1.282	1.641	2.094	2.666	3.386	4.292	5.427	6.848	8.623	10.835	13.585
30	1.348	1.811	2.427	3.243	4.322	5.743	7.612	10.063	13.268	17.449	22.892
40	1.489	2.208	3.262	4.801	7.040	10.086	14.974	21.725	31.409	45.259	65.001
50	1.645	2.692	4.384	7.107	11.467	18.420	29.457	46.902	74.358	117.390	184.570

Period	12%	13%	14%	15%	16%	17%	18%	19%	20%	25%	30%
1	1.120	1.130	1.140	1.150	1.160	1.170	1.180	1.190	1.200	1.250	1.300
2	1.254	1.277	1.300	1.323	1.346	1.369	1.392	1.416	1.440	1.563	1.690
3	1.405	1.443	1.482	1.521	1.561	1.602	1.643	1.685	1.728	1.953	2.197
4	1.574	1.630	1.689	1.749	1.811	1.874	1.939	2.005	2.074	2.441	2.856
5	1.762	1.842	1.925	2.011	2.100	2.192	2.288	2.386	2.488	3.052	3.713
6	1.974	2.082	2.195	2.313	2.436	2.565	2.700	2.840	2.986	3.815	4.827
7	2.211	2.353	2.502	2.660	2.826	3.001	3.185	3.379	3.583	4.768	6.276
8	2.476	2.658	2.853	3.059	3.278	3.511	3.759	4.021	4.300	5.960	8.157
9	2.773	3.004	3.252	3.518	3.803	4.108	4.435	4.785	5.160	7.451	10.604
10	3.106	3.395	3.707	4.046	4.411	4.807	5.234	5.696	6.192	9.313	13.786
11	3.479	3.836	4.226	4.652	5.117	5.624	6.176	6.777	7.430	11.642	17.922
12	3.896	4.335	4.818	5.350	5.936	6.580	7.288	8.064	8.916	14.552	23.298
13	4.363	4.898	5.492	6.153	6.886	7.699	8.599	9.596	10.699	18.190	30.288
14	4.887	5.535	6.261	7.076	7.988	9.007	10.147	11.420	12.839	22.737	39.374
15	5.474	6.254	7.138	8.137	9.266	10.539	11.974	13.590	15.407	28.422	51.186
16	6.130	7.067	8.137	9.358	10.748	12.330	14.129	16.172	18.488	35.527	66.542
17	6.866	7.986	9.276	10.761	12.468	14.426	16.672	19.244	22.186	44.409	86.504
18	7.690	9.024	10.575	12.375	14.463	16.879	19.673	22.091	26.623	55.511	112.460
19	8.613	10.197	12.056	14.232	16.777	19.748	23.214	27.252	31.948	69.389	146.190
20	9.646	11.523	13.743	16.367	19.461	23.106	27.393	32.429	38.338	86.736	190.050
25	17.000	21.231	26.462	32.919	40.874	50.658	62.669	77.388	95.396	264.700	705.640
30	29.960	39.116	50.950	66.212	85.850	111.070	143.370	184.680	237.380	807.790	2,620.000
40	93.051	132.780	188.880	267.860	378.720	533.870	750.380	1,051.700	1,469.800	7,523.200	36,119.000
50	289.000	450.740	700.230	1,083.700	1,670.700	2,566.200	3,927.400	5,998.900	9,100.400	70,065.000	497,929.000

Note: Appendix 1 continues on page 8

Appendix I (continued)

Exhibit 1-B Future value (compounded sum) of \$1 paid in at the end of each period of a given number of time periods (an annuity)

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%
1	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
3	3.030	3.060	3.091	3.122	3.153	3.184	3.215	3.246	3.278	3.310	3.342
4	4.060	4.122	4.184	4.246	4.310	4.375	4.440	4.506	4.573	4.641	4.710
5	5.101	5.204	5.309	5.416	5.526	5.637	5.751	5.867	5.985	6.105	6.228
6	6.152	6.308	6.468	6.633	6.802	6.975	7.153	7.336	7.523	7.716	7.913
7	7.214	7.434	7.662	7.898	8.142	8.394	8.654	8.923	9.200	9.487	9.783
8	8.286	8.583	8.892	9.214	9.549	9.897	10.260	10.637	11.028	11.436	11.859
9	9.369	9.755	10.159	10.583	11.027	11.491	11.978	12.488	13.021	13.579	14.164
10	10.462	10.950	11.464	12.006	12.578	13.181	13.816	14.487	15.193	15.937	16.722
11	11.567	12.169	12.808	13.486	14.207	14.972	15.784	16.645	17.560	18.531	19.561
12	12.683	13.412	14.192	15.026	15.917	16.870	17.888	18.977	20.141	21.384	22.713
13	13.809	14.680	15.618	16.627	17.713	18.882	20.141	21.495	22.953	24.523	26.212
14	14.947	15.974	17.086	18.292	19.599	21.015	22.550	24.215	26.019	27.975	30.095
15	16.097	17.293	18.599	20.024	21.579	23.276	25.129	27.152	29.361	31.772	34.405
16	17.258	18.639	20.157	21.825	23.657	25.673	27.888	30.324	33.003	35.950	39.190
17	18.430	20.012	21.762	23.698	25.840	28.213	30.840	33.750	36.974	40.545	44.501
18	19.615	21.412	23.414	25.645	28.132	30.906	33.999	37.450	41.301	45.599	50.396
19	20.811	22.841	25.117	27.671	30.539	33.760	37.379	41.446	46.018	51.159	56.939
20	22.019	24.297	26.870	29.778	33.066	36.786	40.995	45.762	51.160	57.275	64.203
25	28.243	32.030	36.459	41.646	47.727	54.865	63.249	73.106	84.701	98.347	114.410
30	34.785	40.588	47.575	56.085	66.439	79.058	94.461	113.280	136.310	164.490	199.020
40	48.886	60.402	75.401	95.026	120.800	154.760	199.640	259.060	337.890	442.590	581.830
50	64.463	84.579	112.800	152.670	209.350	290.340	406.530	573.770	815.080	1,163.900	1,668.800

Period	12%	13%	14%	15%	16%	17%	18%	19%	20%	25%	30%
1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2	2.120	2.130	2.140	2.150	2.160	2.170	2.180	2.190	2.200	2.250	2.300
3	3.374	3.407	3.440	3.473	3.506	3.539	3.572	3.606	3.640	3.813	3.990
4	4.779	4.850	4.921	4.993	5.066	5.141	5.215	5.291	5.368	5.766	6.187
5	6.353	6.480	6.610	6.742	6.877	7.014	7.154	7.297	7.442	8.207	9.043
6	8.115	8.323	8.536	8.754	8.977	9.207	9.442	9.683	9.930	11.259	12.756
7	10.089	10.405	10.730	11.067	11.414	11.772	12.142	12.523	12.916	15.073	17.583
8	12.300	12.757	13.233	13.727	14.240	14.773	15.327	15.902	16.499	19.842	23.858
9	14.776	15.416	16.085	16.786	17.519	18.285	19.086	19.923	20.799	25.802	32.015
10	17.549	18.420	19.337	20.304	21.321	22.393	23.521	24.701	25.959	33.253	42.619
11	20.655	21.814	23.045	24.349	25.733	27.200	28.755	30.404	32.150	42.566	56.405
12	24.133	25.650	27.271	29.002	30.850	32.824	34.931	37.180	39.581	54.208	74.327
13	28.029	29.985	32.089	34.352	36.786	39.404	42.219	45.244	48.497	68.760	97.625
14	32.393	34.883	37.581	40.505	43.672	47.103	50.818	54.841	59.196	86.949	127.910
15	37.280	40.417	43.842	47.580	51.660	56.110	60.965	66.261	72.035	109.690	167.290
16	42.753	46.672	50.980	55.717	60.925	66.649	72.939	79.850	87.442	138.110	218.470
17	48.884	53.739	59.118	65.075	71.673	78.979	87.068	96.022	105.930	173.640	285.010
18	55.750	61.725	68.394	75.836	84.141	93.406	103.740	115.270	128.120	218.050	371.520
19	63.440	70.749	78.969	88.212	98.603	110.290	123.410	138.170	154.740	273.560	483.970
20	72.052	80.947	91.025	102.440	115.380	130.030	146.630	165.420	186.690	342.950	630.170
25	133.330	155.620	181.870	212.790	249.210	292.110	342.600	402.040	471.980	1,054.800	2,348.800
30	241.330	293.200	356.790	434.750	530.310	647.440	790.950	966.700	1,181.900	3,227.200	8,730.000
40	767.090	1,013.700	1,342.000	1,779.100	2,360.800	3,134.500	4,163.210	5,529.800	7,343.900	30,089.000	120,393.000
50	2,400.000	3,459.500	4,994.500	7,217.700	10,436.000	15,090.000	21,813.000	31,515.000	45,497.000	80,256.000	165,976.000

Note: Appendix I continues on page 9

Appendix 1 (continued)

Exhibit 1-C Present value of \$1 to be received at the end of a given number of time periods

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%
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
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
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
4	0.961	0.924	0.885	0.855	0.823	0.792	0.763	0.735	0.708	0.683	0.659	0.636
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
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
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
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
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
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386	0.352	0.322
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
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
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
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263	0.232	0.205
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
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
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
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
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
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149	0.124	0.104
25	0.780	0.610	0.478	0.375	0.295	0.233	0.184	0.146	0.116	0.092	0.074	0.059
30	0.742	0.552	0.412	0.308	0.231	0.174	0.131	0.099	0.075	0.057	0.044	0.033
40	0.672	0.453	0.307	0.208	0.142	0.097	0.067	0.046	0.032	0.022	0.015	0.011
50	0.608	0.372	0.228	0.141	0.087	0.054	0.034	0.021	0.013	0.009	0.005	0.003

Period	13%	14%	15%	16%	17%	18%	19%	20%	25%	30%	35%	40%	50%
1	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833	0.800	0.769	0.741	0.714	0.667
2	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694	0.640	0.592	0.549	0.510	0.444
3	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579	0.512	0.455	0.406	0.364	0.296
4	0.613	0.592	0.572	0.552	0.534	0.515	0.499	0.482	0.410	0.350	0.301	0.260	0.198
5	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402	0.320	0.269	0.223	0.186	0.132
6	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335	0.262	0.207	0.165	0.133	0.088
7	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279	0.210	0.159	0.122	0.095	0.059
8	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233	0.168	0.123	0.091	0.068	0.039
9	0.333	0.300	0.284	0.263	0.243	0.225	0.209	0.194	0.134	0.094	0.067	0.048	0.026
10	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162	0.107	0.073	0.050	0.035	0.017
11	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135	0.086	0.056	0.037	0.025	0.012
12	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112	0.069	0.043	0.027	0.018	0.008
13	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093	0.055	0.033	0.020	0.013	0.005
14	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078	0.044	0.025	0.015	0.009	0.003
15	0.160	0.140	0.123	0.108	0.095	0.084	0.074	0.065	0.035	0.020	0.011	0.006	0.002
16	0.141	0.123	0.107	0.093	0.081	0.071	0.062	0.054	0.028	0.015	0.008	0.005	0.002
17	0.125	0.108	0.093	0.080	0.069	0.060	0.052	0.045	0.023	0.012	0.006	0.003	0.001
18	0.111	0.095	0.081	0.069	0.059	0.051	0.044	0.038	0.018	0.009	0.005	0.002	0.001
19	0.098	0.083	0.070	0.060	0.051	0.043	0.037	0.031	0.014	0.007	0.003	0.002	0
20	0.087	0.073	0.061	0.051	0.043	0.037	0.031	0.026	0.012	0.005	0.002	0.001	0
25	0.047	0.038	0.030	0.024	0.020	0.016	0.013	0.010	0.004	0.001	0.001	0	0
30	0.026	0.020	0.015	0.012	0.009	0.007	0.005	0.004	0.001	0	0	0	0
40	0.008	0.005	0.004	0.003	0.002	0.001	0.001	0.001	0	0	0	0	0
50	0.002	0.001	0.001	0.001	0	0	0	0	0	0	0	0	0

Note: Appendix 1 continues on page 10

Appendix 1 (continued)

Exhibit 1-D Present value of \$1 received at the end of each period for a given number of time periods (an annuity)

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%
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
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736	1.713	1.690
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
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
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
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
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868	4.712	4.564
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
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759	5.537	5.328
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145	5.889	5.650
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495	6.207	5.938
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814	6.492	6.194
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103	6.750	6.424
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367	6.982	6.628
15	13.865	12.849	11.939	11.118	10.380	9.712	9.108	8.559	8.061	7.606	7.191	6.811
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
17	15.562	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022	7.549	7.102
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201	7.702	7.250
19	17.226	15.678	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365	7.839	7.366
20	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.818	9.129	8.514	7.963	7.469
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
30	25.808	22.396	19.600	17.292	15.372	13.765	12.409	11.258	10.274	9.427	8.694	8.055
40	32.835	27.355	23.115	19.793	17.159	15.046	13.332	11.925	10.757	9.779	8.951	8.244
50	39.196	31.424	25.730	21.482	18.256	15.762	13.801	12.233	10.962	9.915	9.042	8.304

Period	13%	14%	15%	16%	17%	18%	19%	20%	25%	30%	35%	40%	50%
1	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833	0.800	0.769	0.741	0.714	0.667
2	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528	1.440	1.361	1.289	1.224	1.111
3	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106	1.952	1.816	1.696	1.589	1.407
4	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589	2.362	2.166	1.997	1.849	1.605
5	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991	2.689	2.436	2.220	2.035	1.737
6	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326	2.951	2.643	2.385	2.168	1.824
7	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605	3.161	2.802	2.508	2.263	1.883
8	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837	3.329	2.925	2.598	2.331	1.922
9	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031	3.463	3.019	2.665	2.379	1.948
10	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192	3.571	3.092	2.715	2.414	1.965
11	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327	3.656	3.147	2.752	2.438	1.977
12	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439	3.725	3.190	2.779	2.456	1.985
13	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533	3.780	3.223	2.799	2.469	1.990
14	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611	3.824	3.249	2.814	2.478	1.993
15	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675	3.859	3.268	2.825	2.484	1.995
16	6.604	6.265	5.954	5.668	5.405	5.162	4.938	4.730	3.887	3.283	2.834	2.489	1.997
17	6.729	6.373	6.047	5.749	5.475	5.222	4.988	4.775	3.910	3.295	2.840	2.492	1.998
18	6.840	6.467	6.128	5.818	5.534	5.273	5.033	4.812	3.928	3.304	2.844	2.494	1.999
19	6.938	6.550	6.198	5.877	5.584	5.316	5.070	4.843	3.942	3.311	2.848	2.496	1.999
20	7.025	6.623	6.259	5.929	5.628	5.353	5.101	4.870	3.954	3.316	2.850	2.497	1.999
25	7.330	6.873	6.464	6.097	5.766	5.467	5.195	4.948	3.985	3.329	2.856	2.499	2.000
30	7.496	7.003	6.566	6.177	5.829	5.517	5.235	4.979	3.995	3.332	2.857	2.500	2.000
40	7.634	7.105	6.642	6.233	5.871	5.548	5.258	4.997	3.999	3.333	2.857	2.500	2.000
50	7.675	7.133	6.661	6.246	5.880	5.554	5.262	4.999	4.000	3.333	2.857	2.500	2.000

- END OF APPENDIX 1 -

BU8241 MONEY 101

Please read the following instructions carefully:

- 1. Please do not turn over the question paper until you are told to do so. Disciplinary action may be taken against you if you do so.**
2. You are not allowed to leave the examination hall unless accompanied by an invigilator. You may raise your hand if you need to communicate with the invigilator.
3. Please write your Matriculation Number on the front of the answer book.
4. Please indicate clearly in the answer book (at the appropriate place) if you are continuing the answer to a question elsewhere in the book.