

CERTIFIED PUBLIC ACCOUNTANT INTERMEDIATE LEVEL EXAMINATIONS

11.1: MANAGERIAL FINANCE

MONDAY: 30 NOVEMBER 2015

INSTRUCTIONS:

- 1. Time Allowed: 3 hours 15 minutes (15 minutes reading and 3 hours writing).**
- 2. This examination has two sections A& B.**
- 3. Section A has three Compulsory Questions while B has three Questions two to be attempted.**
- 4. In summary attempt five questions.**
- 5. Marks allocated to each question are shown at the end of the question.**
- 6. Show all your workings**

SECTION A

This section has three compulsory questions

QUESTION ONE

Gitarama Commercial Bank (GCB) plans to invest in a new computer program in order to gain a competitive edge over other commercial banks in the region. The software is to be purchased from the United States of America (USA) at an invoice value of USD 130, 000, which is equivalent to Frw 100 Million. Freight and clearing charges are estimated as Frw 2 Million and Frw 8 million respectively. GCB is to spend Frw 5 million on the salary of the specialist from USA and Frw 5 million to the technician who will carry out installation of the new computer programme. To ensure maximum security, the software will be kept in a strong room that will be hired at a cost of Frw 1 million per year.

REQUIRED:

- Calculate the initial outlay of the proposed investment. (5 Marks)
 - Using the straight line method, compute the amortization charge assuming that the estimated salvage value of the acquired computer software is Frw 21 million and its estimated useful life 5 years. (4 Marks)
 - If the expected net cash inflow, (ignoring time value of money) from the software per annum are Frw 50 million, and the applicable tax rate is to be 30%; calculate the total expected cash inflows for the 5 year period. (10 Marks)
 - Explain the three possible motives for holding cash by a business enterprise like GCB. (6 Marks)
- (Total 25 Marks)

QUESTION TWO

You are the Accountant of Bembe (R) Ltd a wholesale company dealing in sugar. As part of the budgeting process for next year, management has tasked you to project cash receipts and payments for the first part of the year (January to June 2016).

Actual and projected sales

	Year	Bags
November	2015	1,000
December	2015	2,000
January	2016	4,000
February	2016	3,500
March	2016	1,500
April	2016	2,500
May	2016	5,000
June	2016	6,000

The terms of the sales are follows:

- (i) The average selling price of sugar per bag is Frw 30, 000.
- (ii) 75% of sales are for cash.
- (iii) 25% of sales are on credit.
- (iv) Credit sales are collected within two months after the sale.

Actual and projected purchases

	Year	Frw '000'
November	2015	50,000
December	2015	70,000
January	2016	55,000
February	2016	82,500
March	2016	80,000
April	2016	80,000
May	2016	80,000
June	2016	100,000

All purchases are on credit and are paid for one month after purchase.

Additional information:

- (i) Taxes of Frw 10,000,000 will be paid in March and June 2016
- (ii) Salaries of Frw 10,000,000 will be paid every month
- (iii) Dividends of Frw 20,000,000 will be paid to shareholders in April 2016
- (iv) Utilities of Frw 5,000,000 will be paid every month
- (v) Insurance of Frw 7,000,000 will be paid January 2016
- (vi) The opening cash balance as at 1 January 2016 will be Zero.

REQUIRED:

(a) Prepare Bembe (R) Ltd cash budget for the period January to June 2016. (15 Marks)

(a) Explain five ways in which a cash budget is important to an organization like Bembe (R) Ltd (5 Marks)

(Total 20 Marks)

QUESTION THREE

Bitebyawe Ltd (BBL) located in Butare was incorporated in January, 2010. The company sells electrical appliances and provides electric wiring and maintenance services to individuals and companies. In an interview with a local television station, Dukuzumuremyi, the managing director of BBL, attributed the company's success to three key issues that is:

- (i) Creation of shareholder value
- (ii) Meeting all the requirements of stakeholders
- (iii) Business ethics and concern for the environment.

REQUIRED:

- (a) Explain any two corporate objectives of BBL. **(4 Marks)**
- (b) Identify any five stakeholders' interests that BBL might have met for it to succeed. **(5 Marks)**
- (c) Differentiate between business ethics and corporate social responsibility. **(6 Marks)**

(Total 15 Marks)

SECTION B

This section has three questions and two are to be attempted

QUESTION FOUR

MAFI is a Kigali based company that was incorporated in December 2014. It manufactures building materials. MAFI considered increasing its market share by capturing the market from established companies. To achieve their strategy they plan to open up branches in major towns of Rwanda. This required MAFI to access external finances. MAFI has failed to acquire loans from commercial banks in Kigali because of lack of adequate collateral. A financial management specialist has advised the directors of MAFI consider options of: issue debt instruments with warrants; issue convertible debentures; or list the company on Rwanda stock exchange.

REQUIRED:

- (a) Contrast the following terms as used in managerial finance:
 - (i) Warrants **(5 Marks)**
 - (ii) Convertible debentures. **(5 Marks)**
- (b) Discuss five roles of capital market in an economy like Rwanda's **(10 Marks)**

(Total 20 Marks)

QUESTION FIVE

Sundowners Ltd holds bonds with National Bank of Rwanda with an expected return of 5% and also holds shares in Bank of Kigali with an expected return of 15% and a standard deviation of 6%.

REQUIRED:

- (a) Assume Sundowners Ltd holds both securities in equal proportions; determine the return and risk of the portfolio. **(8 Marks)**

- (b) Explain what is meant by the following:
- (i) A portfolio (3 Marks)
 - (ii) Portfolio theory (3 Marks)
 - (iii) Effective portfolio (3 Marks)
 - (iv) Total risk (3 Marks)
- (Total 20 Marks)**

QUESTION SIX

Makanga (R) Ltd is public limited company listed in Rwanda. It deals in manufacturing of fast moving consumer goods (FMCG). It usually sells its products on credit. The credit controller proposed different measures of improving the collection of revenues from their customers ranging from allowing discounts to extension of credit periods.

The suggestions are:

- (i) Allow 3% discount to a customer who was given 30 days credit to pay within 10 days.
 - (ii) Allow 2% discount to a customer who was originally given 50 days credit to pay within 30 days.
- Assume 360 days in a year.

REQUIRED:

- (a) Calculate the cost of credit in the two scenarios above. (4 Marks)
- (b) Define the term factoring as used in working capital management. (2 Marks)
- (c) Define the term 'overtrading' and explain four of its causes. (6 Marks)
- (d) Explain four reasons why companies offer credit to their customers. (4 Marks)
- (e) Explain four factors a credit controller would consider when assessing the credit worthiness of his/her customers. (4 Marks)

(Total 20 Marks)

End of question paper

Present value interest factor of \$1 per period at i% for n periods, PVIFA (i,n).

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606
16	14.718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.313	7.824
17	15.562	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201
19	17.226	15.678	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365
20	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.818	9.129	8.514

Present value interest factor of \$1 per period at i% for n periods, PVIFA (i,n).

Period	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192
11	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327
12	6.492	6.194	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439
13	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533
14	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611
15	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675
16	7.379	6.974	6.604	6.265	5.954	5.668	5.405	5.162	4.938	4.730
17	7.549	7.120	6.729	6.373	6.047	5.749	5.475	5.222	4.990	4.775
18	7.702	7.250	6.840	6.467	6.128	5.818	5.534	5.273	5.033	4.812
19	7.839	7.366	6.938	6.550	6.198	5.877	5.584	5.316	5.070	4.843
20	7.963	7.469	7.025	6.623	6.259	5.929	5.628	5.353	5.101	4.870

Future value interest factor of \$1 per period at i% for n periods, FVIF(i,n).

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	1.010	1.020	1.030	1.040	1.050	1.060	1.070	1.080	1.090	1.100
2	1.020	1.040	1.061	1.082	1.103	1.124	1.145	1.166	1.188	1.210
3	1.030	1.061	1.093	1.125	1.158	1.191	1.225	1.260	1.295	1.331
4	1.041	1.082	1.126	1.170	1.216	1.262	1.311	1.360	1.412	1.464
5	1.051	1.104	1.159	1.217	1.276	1.338	1.403	1.469	1.539	1.611
6	1.062	1.126	1.194	1.265	1.340	1.419	1.501	1.587	1.677	1.772
7	1.072	1.149	1.230	1.316	1.407	1.504	1.606	1.714	1.828	1.949
8	1.083	1.172	1.267	1.369	1.477	1.594	1.718	1.851	1.993	2.144
9	1.094	1.195	1.305	1.423	1.551	1.689	1.838	1.999	2.172	2.358
10	1.105	1.219	1.344	1.480	1.629	1.791	1.967	2.159	2.367	2.594
11	1.116	1.243	1.384	1.539	1.710	1.898	2.105	2.332	2.580	2.853
12	1.127	1.268	1.426	1.601	1.796	2.012	2.252	2.518	2.813	3.138
13	1.138	1.294	1.469	1.665	1.886	2.133	2.410	2.720	3.066	3.452
14	1.149	1.319	1.513	1.732	1.980	2.261	2.579	2.937	3.342	3.797
15	1.161	1.346	1.558	1.801	2.079	2.397	2.759	3.172	3.642	4.177
16	1.173	1.373	1.605	1.873	2.183	2.540	2.952	3.426	3.970	4.595
17	1.184	1.400	1.653	1.948	2.292	2.693	3.159	3.700	4.328	5.054
18	1.196	1.428	1.702	2.026	2.407	2.854	3.380	3.996	4.717	5.560
19	1.208	1.457	1.754	2.107	2.527	3.026	3.617	4.316	5.142	6.116
20	1.220	1.486	1.806	2.191	2.653	3.207	3.870	4.661	5.604	6.727

Future value interest factor of \$1 per period at i% for n periods, FVIF(i,n).

Period	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	1.110	1.120	1.130	1.140	1.150	1.160	1.170	1.180	1.190	1.200
2	1.232	1.254	1.277	1.300	1.323	1.346	1.369	1.392	1.416	1.440
3	1.368	1.405	1.443	1.482	1.521	1.561	1.602	1.643	1.685	1.728
4	1.518	1.574	1.630	1.689	1.749	1.811	1.874	1.939	2.005	2.074
5	1.685	1.762	1.842	1.925	2.011	2.100	2.192	2.288	2.386	2.488
6	1.870	1.974	2.082	2.195	2.313	2.436	2.565	2.700	2.840	2.986
7	2.076	2.211	2.353	2.502	2.660	2.826	3.001	3.185	3.379	3.583
8	2.305	2.476	2.658	2.853	3.059	3.278	3.511	3.759	4.021	4.300
9	2.558	2.773	3.004	3.252	3.518	3.803	4.108	4.435	4.785	5.160
10	2.839	3.106	3.395	3.707	4.046	4.411	4.807	5.234	5.695	6.192
11	3.152	3.479	3.836	4.226	4.652	5.117	5.624	6.176	6.777	7.430
12	3.498	3.896	4.335	4.818	5.350	5.936	6.580	7.288	8.064	8.916
13	3.883	4.363	4.898	5.492	6.153	6.886	7.699	8.599	9.596	10.699
14	4.310	4.887	5.535	6.261	7.076	7.988	9.007	10.147	11.420	12.839
15	4.785	5.474	6.254	7.138	8.137	9.266	10.539	11.974	13.590	15.407
16	5.311	6.130	7.067	8.137	9.358	10.748	12.330	14.129	16.172	18.488
17	5.895	6.866	7.986	9.276	10.761	12.468	14.426	16.672	19.244	22.186
18	6.544	7.690	9.024	10.575	12.375	14.463	16.879	19.673	22.901	26.623
19	7.263	8.613	10.197	12.056	14.232	16.777	19.748	23.214	27.252	31.948
20	8.062	9.646	11.523	13.743	16.367	19.461	23.106	27.393	32.429	38.338

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