Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

MBA.Evening Sem-III Regular Examination January 2011

Subject code: 820003 **Subject Name: Financial Management**

Date: 03 /01 /2011 **Time: 10.30 am – 01.00 pm**

Total Marks: 70

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1 **(a)** Anurag Limited borrows Rs.2,000,000 at an interest rate of 12 percent. The loan is to be repaid in 5 equal annual instalments payable at the end of each of the next 5 years. Prepare the loan amortisation schedule. **07**

(b) Critically evaluate the goals of maximization of profit and maximization of returns on equity. **07**

Q.2 **(a)** The market value of a Rs.100 par value bond, carrying a coupon rate of 8.5 percent and maturing after 8 years, is Rs.95. What is the yield to maturity on this bond? **07**

(b) State the objectives of a working capital policy and discuss the major issues which must be addressed when formulating a policy. **07**

OR

(b) Your company is considering two mutually exclusive projects, *A* and *B*. Project *A* involves an outlay of Rs.250 million which will generate an expected cash inflow of Rs.60 million per year for 8 years. Project *B* calls for an outlay of Rs.100 million which will produce an expected cash inflow of Rs.25 million per year for 8 years. The company's cost of capital is 14 percent. **07**

a. Calculate the NPV and IRR of each project

b. What is the NPV and IRR of the differential project

Q.3 **(a)** What is an indifference point in the EBIT-EPS analysis? How would you compute it? **07**

(b) A firm's estimated demand for a material during the next year is 2500 units. Acquisition costs are Rs. 400 per order and carrying cost is Rs. 50 per unit. The safety stock is set at 25 percent of the EOQ. The daily usage is 10 units and lead time is 10 days. Determine (a) the EOQ, (b) the safety stock, and (c) the reorder point. **07**

OR

Q.3 **(a)** Explain the assumptions and implications of the NI approach and the NOI approach. Illustrate your answer with hypothetical examples. **07**

(b) Calculate operating leverage and financial leverage under situations 1 and 2 and financial plans A and B respectively from the following information relating to the operation and capital structure of a company. What are the combinations of operating and financial leverage which give the highest and the least value? **07**

Installed Capacity	2000 units
Actual Production and Sales	50% of installed capacity
Selling Price per unit	Rs. 20
Variable Cost per unit	Rs. 10

Fixed Costs:

Situation 1: Rs. 4,000

Situation 2: Rs. 5,000

Capital Structure:

	Financial Plans	
	A	B
	Rs.	Rs.
Equity	5,000	5,000
Debt (Cost of debt = 10%)	15,000	15,000
	20,000	20,000

Q.4 **(a)** What is a right issue? What are its advantages and disadvantages from the company's and shareholder's point of view? **07**

(b) What is the hire purchase financing? How does it differ from the lease financing? **07**

OR

Q.4 **(a)** What are the steps involved in a venture capital investment process? Explain them briefly. **07**

(b) Despite its weaknesses, the payback period method is popular in practice? What are the reasons for its popularity? **07**

Q.5 **(a)** "Walter's and Gordon's models are essentially based on the same assumptions. Thus, there is no basic difference between the two models." Do you agree or not? Why? **07**

(b) What is Modigliani-Miller's dividend irrelevance hypothesis? Critically evaluate its assumptions. **07**

OR

Q.5 **(a)** The following data is available for Newton Limited: **07**

Earnings per share = Rs.6.00

Rate of return = 18 percent

Cost of capital = 15 percent

(a) If Walter's valuation formula holds, what will be the price per share when the dividend payout ratio is 30 percent? 40 percent?

(b) If Gordon's basic valuation formula holds, what will be the price per share when the dividend payout is 30 percent, 40 percent?

(b) 'The equity capital is cost free.' Do you agree? Give reasons. **07**

Table

Present value interest factor of an (ordinary) annuity of $1 per period at I% for n periods ($PVIFA_{I,n}$)

$$(PVIFA_{I,n}) = \sum_{t=1}^{n} 1/(1+I)^t = \frac{1-[1/(1+I)^n]}{I}$$

PERIOD (n)	INTEREST RATE (I)											
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%
1	.990	.980	.971	.962	.952	.943	.935	.926	.917	.909	.901	.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	7.326	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	11.938	11.118	10.380	9.712	9.108	8.560	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	7.120
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	15.679	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365	7.839	7.366
20	18.046	16.352	14.877	13.590	12.462	11.470	10.594	9.818	9.129	8.514	7.963	7.469
25	22.023	19.524	17.413	15.622	14.094	12.784	11.654	10.675	9.823	9.077	8.422	7.843
30	25.808	22.396	19.601	17.292	15.373	13.765	12.409	11.258	10.274	9.427	8.694	8.055
35	29.409	24.999	21.487	18.665	16.374	14.498	12.948	11.655	10.567	9.644	8.855	8.176
40	32.835	27.356	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 (n)	INTEREST RATE (I)											
	13%	14%	15%	16%	17%	18%	19%	20%	25%	30%	40%	50%
1	.885	.877	.870	.862	.855	.847	.840	.833	.800	.769	.714	.667
2	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528	1.440	1.361	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	1.589	1.407
4	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589	2.362	2.166	1.849	1.605
5	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991	2.689	2.436	2.035	1.737
6	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326	2.951	2.643	2.168	1.824
7	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605	3.161	2.802	2.263	1.883
8	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837	3.329	2.925	2.331	1.922
9	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031	3.463	3.019	2.379	1.948
10	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192	3.571	3.092	2.414	1.965
11	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327	3.656	3.147	2.438	1.977
12	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439	3.725	3.190	2.456	1.985
13	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533	3.780	3.223	2.469	1.990
14	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611	3.824	3.249	2.478	1.993
15	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675	3.859	3.268	2.484	1.995
16	6.604	6.265	5.954	5.668	5.405	5.162	4.938	4.730	3.887	3.283	2.489	1.997
17	6.729	6.373	6.047	5.749	5.475	5.222	4.990	4.775	3.910	3.295	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	2.494	1.999
19	6.938	6.550	6.198	5.877	5.584	5.316	5.070	4.843	3.942	3.311	2.496	1.999
20	7.025	6.623	6.259	5.929	5.628	5.353	5.101	4.870	3.954	3.316	2.497	1.999
25	7.330	6.873	6.464	6.097	5.766	5.467	5.195	4.948	3.985	3.329	2.499	2.000
30	7.496	7.003	6.566	6.177	5.829	5.517	5.235	4.979	3.995	3.332	2.500	2.000
35	7.586	7.070	6.617	6.215	5.858	5.539	5.251	4.992	3.998	3.333	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	2.500	2.000
50	7.675	7.133	6.661	6.246	5.880	5.554	5.262	4.999	4.000	3.333	2.500	2.000

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