Total No. of Pages 4

II SEMESTER, MBA(BA)

END SEMESTER EXAMINATION *May/June-2019*

MB-203 FINANCIAL MANAGEMENT

Time: 3:00 Hours ***Max. Marks: 60***

Note: All questions are compulsory

Q.1 Write short notes on **any three** of following: (5 Marks each)

a) Time value of money
b) Profitability Index
c) Wealth maximization
d) Trading on Equity

Q.2 A. Certainty Enterprises is considering two projects A and B with initial outlays of ₹50,00,000 and ₹60,00,000. The inflows of the projects are sensitive to the economic conditions that are expected to prevail over 10 years; the life of each of the project. The cash flows for the 4 different economic conditions of Excellent, Good, Average and Poor with their respective probabilities are as below:

		Cash Flows (₹Lakhs)	
	Probability	**A**	**B**
Initial cost	**Certain**	**-50**	**-60**
Excellent	0.30	15	18
Good	0.20	12	14
Average	0.30	10	12
Poor	0.20	8	7

Required rate of return is 15%.

a) What is the net present value of the projects under the different economic conditions? (6 Marks)
b) What NPV you expect for each of the project (ENPV)? (2 Marks)
c) If the life of both projects was only 1 year, what would be risk associated with the project based on standard deviation and coefficient of variation? (4 Marks)

Q.2.B. The management of Capital Choosers Ltd has 5 projects A, B, C, D and E on hand. The initial outlays, annual cash flows and life of projects is given below:

	Project A	Project B	Project C	Project D	Project E
Initial Outlay (₹Lakhs)	100	150	175	180	135
Expected annual cash flow (₹Lakhs)	22	34	49	43	37
Life of project years	10	9	6	8	7

a) Find NPV and Profitability Index of each project assuming the cost of capital to be 15%.
(5 Marks)

b) Rank project on basis of PI criteria. Which project will be chosen if there is a budget constraint of ₹500 lakh and projects are divisible? (3 Marks)

Q.3.A. Bhaskar Manufacture Ltd. has equity share capital of ₹500,000 (face value of ₹ 100). To meet the expenditure of an expansion program, the company wishes to raise ₹300,000 and is having following alternatives as sources of funds:

Plan A: To have full money from issue of equity
Plan B: To have ₹ 100,000 from equity shares and ₹ 200,000 from borrowings from financial institution at 10% p.a.
Plan C: To have full money from borrowings at 10% p.a.

The company has present earnings of ₹150,000. The corporate tax rate is 50%.

a) Calculate EPS for all plans & advise the most suitable plan to raise required funds.
((3x 2)+ 2 = 8 Marks)

Q.3.B. Calculate the degree of operating leverage and degree of financial leverage according to the data given below for companies A and B: (3X2 = 6 marks)

	A	B
Output in Units	70,000	25,000
Fixed costs	10,000	13,000
Variable cost/ unit	0.2	1.5
Interest on borrowed funds	5,000	18,000
Selling price per unit	0.6	5

Q.3.C. Financial leverage is a double-edged sword. Do you agree, why?

OR —31—

Q.3

Brightways Ltd. faces three possible economic conditions very poor, poor, normal and good. Brightways' possible level of sales and operating expenses with their probability of occurrence are given in table below:

Expected Sales, EBIT, ROI with associated probabilities

	Poor	Poor	Normal		Good
Probability	0.10	0.15	0.35	0.30	0.05
Sales	660	710	800	880	1160
Costs:					
Variable cost	330	355	400	440	580
Fixed cost	280	280	280	280	280
Total Cost	610	635	680	720	860
EBIT	50	75	120	160	300
ROI	10%	15%	24%	32%	60%

The company is considering two financial plans:

1. Raise entire funds by issuing 50,000 ordinary shares at 10 per share
2. Or to raise ₹250,000 by issuing 25,000 shares of ₹10 each and borrow 250,000 at 15%.

The **tax rate of 50%.**

a) What are the effects of alternative plans on shareholders' earnings? (10 marks)

b) Does state of economy have a bearing on choice of financial plan, please state in context of information given about Bright ways. (3 marks)

c) Financial leverage is a double-edged sword. Do you agree? (2 Marks)

Q.4 A. Mr Sunil takes a loan of INR 100,000 at 14% rate of interest for purchasing a car. The loan has to be repaid over the next 5 years.

a) Estimate the equal annual instalment to be given by Mr Sunil to repay his principal plus interest in the 5 years. (3 Marks)

b) Prepare schedule of loan amortization (5 Marks)

Q.4 B. How much amount should be invested now so that Mr Sunil receives INR 100,000 each year in perpetuity at an interest rate of 10%? (2 Marks)

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

Period	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.808	1.783	1.759	1.736	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.624	2.577	2.531	2.487	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.387	3.312	3.240	3.170	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	4.100	3.993	3.890	3.791	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	4.767	4.623	4.486	4.355	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	5.389	5.206	5.033	4.868	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	5.971	5.747	5.535	5.335	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	6.515	6.247	5.995	5.759	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	7.024	6.710	6.418	6.145	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192
11	7.499	7.139	6.805	6.495	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327
12	7.943	7.536	7.161	6.814	6.492	6.194	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439
13	8.358	7.904	7.487	7.103	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533
14	8.745	8.244	7.786	7.367	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611
15	9.108	8.559	8.061	7.606	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675
16	9.447	8.851	8.313	7.824	7.379	6.974	6.604	6.265	5.954	5.668	5.405	5.162	4.938	4.730
17	9.763	9.122	8.544	8.022	7.549	7.120	6.729	6.373	6.047	5.749	5.475	5.222	4.990	4.775
18	10.059	9.372	8.756	8.201	7.702	7.250	6.840	6.467	6.128	5.818	5.534	5.273	5.033	4.812
19	10.336	9.604	8.950	8.365	7.839	7.366	6.938	6.550	6.198	5.877	5.584	5.316	5.070	4.843
20	10.594	9.818	9.129	8.514	7.963	7.469	7.025	6.623	6.259	5.929	5.628	5.353	5.101	4.870
25	11.654	10.675	9.823	9.077	8.422	7.843	7.330	6.873	6.464	6.097	5.766	5.467	5.195	4.948
30	12.409	11.258	10.274	9.427	8.694	8.055	7.496	7.003	6.566	6.177	5.829	5.517	5.235	4.979

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

riod	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.907	0.890	0.873	0.857	0.842	0.826	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.864	0.840	0.816	0.794	0.772	0.751	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.823	0.792	0.763	0.735	0.708	0.683	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.784	0.747	0.713	0.681	0.650	0.621	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.746	0.705	0.666	0.630	0.596	0.564	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.711	0.665	0.623	0.583	0.547	0.513	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.677	0.627	0.582	0.540	0.502	0.467	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.645	0.592	0.544	0.500	0.460	0.424	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.614	0.558	0.508	0.463	0.422	0.386	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11	0.585	0.527	0.475	0.429	0.388	0.350	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12	0.557	0.497	0.444	0.397	0.356	0.319	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13	0.530	0.469	0.415	0.368	0.326	0.290	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14	0.505	0.442	0.388	0.340	0.299	0.263	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.481	0.417	0.362	0.315	0.275	0.239	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.074	0.065
16	0.458	0.394	0.339	0.292	0.252	0.218	0.188	0.163	0.141	0.123	0.107	0.093	0.081	0.071	0.062	0.054
17	0.436	0.371	0.317	0.270	0.231	0.198	0.170	0.146	0.125	0.108	0.093	0.080	0.069	0.060	0.052	0.045
18	0.416	0.350	0.296	0.250	0.212	0.180	0.153	0.130	0.111	0.095	0.081	0.069	0.059	0.051	0.044	0.038
19	0.396	0.331	0.277	0.232	0.194	0.164	0.138	0.116	0.098	0.083	0.070	0.060	0.051	0.043	0.037	0.031
20	0.377	0.312	0.258	0.215	0.178	0.149	0.124	0.104	0.087	0.073	0.061	0.051	0.043	0.037	0.031	0.026
25	0.295	0.233	0.184	0.146	0.116	0.092	0.074	0.059	0.047	0.038	0.030	0.024	0.020	0.016	0.013	0.010