

THE OPEN UNIVERSITY OF SRI LANKA
BACHELOR OF MANAGEMENT STUDIES DEGREE (BMS) - LEVEL 5
FINAL EXAMINATION 2008
PROJECT APPRAISAL - MCU 3204



DURATION: THREE (03) HOURS

DATE : 14.02.2008

TIME : 1.30 p.m. – 4.30 p.m.

- Instructions:** (I) Answer **Question 1 (compulsory)** and any **THREE (03)** from others.
 (II) Use of non-programmable calculators is allowed.
 (III) A PV table is attached herewith.

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ABA Company is planning to start a project in Sri Lanka on manufacturing traveling bags by using recycled plastics. New machinery and equipment has to be imported from Japan and it would cost Rs. 5.0 Mn. Another Rs. 1.0 Mn is required for constructing a new building and Rs. 200,000 for machinery installation. The company expects to price a bag at Rs. 1,000/= for the first four years and thereafter at Rs. 1,100/=. A demand is forecasted as 4,000 bags for the first year with a 10% annual increase (based on the first year) thereafter. The operating expenses are estimated as Rs. 400/= per bag in the first year and an 10% annual increase (based on the first year) thereafter. An amount of Rs. 500,000 is to be invested as working capital.

A consultancy fee of another Rs. 200,000 is to be incurred in year 3. The project ends in the sixth year and all working capital is realized. The resale value of the machinery is estimated as Rs. 500,000. The management of ABC Company considers that 15% will be the appropriate cost of capital for the evaluation of this project.

- (i) If the company expects a larger number of new entrants to this industry and increase competition in the market after year 5, will this project be viable? Give reasons. (06 Marks)
- (ii) What is the NPV of the project? (06 Marks)
- (iii) Calculate the Net Benefit Investment Ratio (NBIR) for the project? (06 Marks)
- (iv) If you apply the straight line method for depreciation of machinery and no scrape value is expected, is this project profitable as far as Accounting Rate of Return is considered? Explain (05 Marks)
- (v) Suppose a half of the total capital requirement (50%) of the project will be financed by a bank loan at 20% interest and rest is from equity (cost is 16%). As per the Internal Rate of Return, is this project feasible? Explain. (07 Marks)
- (vi) Comment on the feasibility of the project by considering Sri Lankan social, environmental, economic, technological and political situation with the above computed values. (10 Marks)

(Total 40 Marks)

- 2 (i) Explain with examples how the government policies may help to generate project ideas. (10 Marks)
- (ii) "Economic environment has a great influence on the market available for new projects". Evaluate this statement using suitable examples. (10 Marks)
- 3 (i) Explain why an independent appraisal is necessary before financing a project? (10 Marks)
- (ii) Why do you think that a provision for contingency is necessary in project cost estimates? Explain by using examples. (10 Marks)
- 4 (i) Explain the factors that should be taken in to consideration in determining an appropriate capital structure of a project. (10 Marks)
- (ii) Suppose two financing alternatives for a project where Alternative A is to finance total capital of Rs. 250Mn with equity, while the Alternative B employs Rs. 150 Mn equity and the balance Rs. 100 Mn by 22% bank loan. The owners expect 20% dividend in both alternatives. The corporate tax rate is 35% and earnings before interest and tax is Rs. 150 Mn.. Evaluate the project investment options and advise on selecting the best alternative. (10 Marks)
- 5 (i) "It is advisable to incorporate the impact of inflation in project cash flows but it is rather difficult" Do you agree with this statement? Give your answer with suitable examples. (10 Marks)
- (ii) Explain how the following variables create liquidity and solvency risk for a project in the presence of inflation.
a. interest rate b. accounts payable c. cash balance (10 Marks)
- 6 State whether the following statements are true or false and explain your answer.
- (i) The economic viability and financial viability of a project are the same.
- (ii) Since inflation affects both cash inflows and outflows, one can neglect the effect of inflation in his decision making.
- (iii) Only cash flows directly related to the project should be taken in to account, in the cash flow projection.
- (iv) Many projects fail due to weak management.
- (v) Break Even Point analysis could be applied only for short term planning and decision making. (5 x 4 Marks)

Table of Present Values

$PVIF = 1/(1+i)^n$

Period (n)	Discount rates														
	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	22%	24%
1	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696	0.8621	0.8547	0.8475	0.8403	0.8333	0.8197	0.8065
2	0.8573	0.8417	0.8264	0.8116	0.7972	0.7831	0.7695	0.7561	0.7432	0.7305	0.7182	0.7062	0.6944	0.6719	0.6504
3	0.7938	0.7722	0.7513	0.7312	0.7118	0.6931	0.6750	0.6575	0.6407	0.6244	0.6086	0.5934	0.5787	0.5507	0.5245
4	0.7350	0.7084	0.6830	0.6587	0.6355	0.6133	0.5921	0.5718	0.5523	0.5337	0.5158	0.4987	0.4823	0.4514	0.4230
5	0.6806	0.6499	0.6209	0.5935	0.5674	0.5428	0.5194	0.4972	0.4761	0.4561	0.4371	0.4190	0.4019	0.3700	0.3411
6	0.6302	0.5963	0.5645	0.5346	0.5066	0.4803	0.4556	0.4323	0.4104	0.3898	0.3704	0.3521	0.3349	0.3033	0.2751
7	0.5835	0.5470	0.5132	0.4817	0.4523	0.4251	0.3996	0.3759	0.3538	0.3332	0.3139	0.2959	0.2791	0.2486	0.2218
8	0.5403	0.5019	0.4665	0.4339	0.4039	0.3762	0.3506	0.3269	0.3050	0.2848	0.2660	0.2487	0.2326	0.2038	0.1789
9	0.5002	0.4604	0.4241	0.3909	0.3606	0.3329	0.3075	0.2843	0.2630	0.2434	0.2255	0.2090	0.1938	0.1670	0.1443
10	0.4632	0.4224	0.3855	0.3522	0.3220	0.2946	0.2697	0.2472	0.2267	0.2080	0.1911	0.1756	0.1615	0.1369	0.1164

Table of Present Values

$PVIF = 1/(1+i)^n$

Period (n)	Discount rates														
	25%	26%	27%	28%	30%	32%	34%	36%	38%	40%	42%	44%	46%	48%	50%
1	0.8000	0.7937	0.7874	0.7813	0.7692	0.7576	0.7463	0.7353	0.7246	0.7143	0.7042	0.6944	0.6849	0.6757	0.6667
2	0.6400	0.6299	0.6200	0.6104	0.5917	0.5739	0.5569	0.5407	0.5251	0.5102	0.4959	0.4823	0.4691	0.4565	0.4444
3	0.5120	0.4999	0.4882	0.4768	0.4552	0.4348	0.4156	0.3975	0.3805	0.3644	0.3492	0.3349	0.3213	0.3085	0.2963
4	0.4096	0.3968	0.3844	0.3725	0.3501	0.3294	0.3102	0.2923	0.2757	0.2603	0.2459	0.2326	0.2201	0.2084	0.1975
5	0.3277	0.3149	0.3027	0.2910	0.2693	0.2495	0.2315	0.2149	0.1998	0.1859	0.1732	0.1615	0.1507	0.1408	0.1317
6	0.2621	0.2499	0.2383	0.2274	0.2072	0.1890	0.1727	0.1580	0.1448	0.1328	0.1220	0.1122	0.1032	0.0952	0.0878
7	0.2097	0.1983	0.1877	0.1776	0.1594	0.1432	0.1289	0.1162	0.1049	0.0949	0.0859	0.0779	0.0707	0.0643	0.0585
8	0.1678	0.1574	0.1478	0.1388	0.1226	0.1085	0.0962	0.0854	0.0760	0.0678	0.0605	0.0541	0.0484	0.0434	0.0390
9	0.1342	0.1249	0.1164	0.1084	0.0943	0.0822	0.0718	0.0628	0.0551	0.0484	0.0426	0.0376	0.0332	0.0294	0.0260
10	0.1074	0.0992	0.0916	0.0847	0.0725	0.0623	0.0536	0.0462	0.0399	0.0346	0.0300	0.0261	0.0227	0.0198	0.0173

