



**THE OPEN UNIVERSITY OF SRI LANKA**  
**BACHELOR OF MANAGEMENT STUDIES DEGREE (BMS) - LEVEL 5**  
**FINAL EXAMINATION – JANUARY 2020**  
**PROJECT APPRAISAL - MCU3204 / MSU5504**

**DURATION: THREE (03) HOURS**

**DATE : 05.01.2020**

**TIME : 1.30 pm - 4.30 pm**

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

1. ABC company is considering a project which requires a capital outlay of Rs. 12000,000 and earns the following cash inflows over the following seven years:

Year	Inflows (in Rs'000)
1	2,000
2	2,000
3	2,500
4	3,000
5	3,000
6	1,000
7	2,000

The project will be completed at the end of seventh year and all fixed assets are expected to be sold for Rs. 1,500,000. The project will incur operating costs of Rs. 975,000 in the first year, including depreciation of Rs. 500,000. This operating cost is expected to be increased annually thereafter by an additional Rs. 100,000 than the previous year.

The project's expected rate of return is 10%.

- Calculate the project's payback period. (04 marks)
- Calculate NPV of the project. (06 marks)
- What is the Accounting Rate of Return (ARR) for the project? Explain the advantages and disadvantages of using ARR as a decision tool? (06 marks)
- What is the Net Benefit Investment Ratio (NBIR) of the project? How do you appraise the project when NBIR of the project is concerned? (06 marks)
- What is the Internal rate of Return (IRR) of the project? Comment on the result. (07 marks)
- How do you use NPV and IRR in arriving investment decisions? Explain. (05 marks)

- (vii) What will be the risk of making the investment decision when you consider only the above two methods in appraising this project? Discuss. (06 marks)

(Total 40 Marks)

2. (i) "A comprehensive appraisal is a must before the commitment of scarce resources for any project". Evaluate this statement with the aid of suitable examples.  
(ii) What are the different sources of government project ideas? Explain. (20 Marks)
3. (i) How does choosing and understanding of the market segments and target market help in carrying out a proper market analysis for project planning? Explain.  
(ii) What are the factors that should be considered in forecasting demand of a commercial project? Describe. (20 marks)
4. (i) Explain how government macroeconomic policies affect the implementation of both public and private sector projects.  
(ii) "Incomplete financial appraisal is the major reason for failures of most projects". Comment. (20 marks)
5. State whether you agree or disagree with following statements. Explain the basis for your answers.
  - (i) "Managerial and institutional analysis is more important for social projects than commercial projects"
  - (ii) "The cost and the cost structure can be different from a project to project."
  - (iii) "Analyzing cost is the bridge between technical and financial analysis of projects."
  - (iv) "Unless the effect of inflation is properly addressed, the project analysis would be misleading."

(20 marks)

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## PRESENT VALUE TABLE

Present value of \$1, that is  $(1+r)^{-n}$  where  $r$  = interest rate;  $n$  = number of periods until payment or receipt.

Periods (n)	Interest rates (r)									
	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	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218
17	0.844	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.198
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180
19	0.828	0.686	0.570	0.475	0.396	0.331	0.277	0.232	0.194	0.164
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149

Periods (n)	Interest rates (r)									
	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	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.079	0.065
16	0.188	0.163	0.141	0.123	0.107	0.093	0.081	0.071	0.062	0.054
17	0.170	0.146	0.125	0.108	0.093	0.080	0.069	0.060	0.052	0.045
18	0.153	0.130	0.111	0.095	0.081	0.069	0.059	0.051	0.044	0.038
19	0.138	0.116	0.098	0.083	0.070	0.060	0.051	0.043	0.037	0.031
20	0.124	0.104	0.087	0.073	0.061	0.051	0.043	0.037	0.031	0.026

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