

WOMEN'S UNIVERSITY IN AFRICA



Addressing gender disparity and fostering equity in University Education

FACULTY OF MANAGEMENT AND ENTREPRENEURIAL SCIENCES

DIPLOMA IN PROJECT PLANNING MANAGEMENT

MAIN PAPER

DPM 112: PROJECT FINANCES

INTAKE 3: FIRST YEAR FIRST SEMESTER

DATE:

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES

Answer Question **1** and any other **two**.

Question 1

Jonathan Ngoda a farmer inherited \$150 000 from his late grandfather. He sat down with his wife Tabitha to discuss as to how best they can make use of this windfall. Tabitha was of the opinion that under the current harsh economic environment going into business was too risky and suggested that they invest the \$150 000 into NBS Bank where they could earn 10% interest per annum which she believed was far much better than what Jonathan was making as a commuter omnibus operator. After a lengthy discussion Jonathan convinced his wife that they go into a livestock farming project in Mazoe Farms under the program of Command Agriculture. He strongly believed that they would succeed as he had experience in Farming and that Tabitha would ensure that accurate project financial appraisal was maintained to ensure that a viable project would be selected.

The following are projected Cashflows for investing in either Pig or Goat projects over a period of five years.

	Pig \$	Goat \$
Initial Capital Expenditure	130 000	85 000
Net Cash flow Year 1	40 000	25 000
2	50 000	25 000
3	60 000	32 000
4	10 000	36 000
5	20 000	10 000

Required:

Given their limited knowledge of Project Management, Tabitha could not proceed on to produce project financial appraisal. Jonathan then approaches you for assistance in producing project financial appraisal.

- Calculate the payback period for the two projects, and advice which project is viable [6]
- Calculate the net present value (NPV) for the two projects using a cost of capital of 10% and advise on which project is best [10]
- Calculate the Internal rate of return (IRR) of the two projects and comment on your findings [14]
- Explain Benefit-Cost Ratio as a method used in determining the project worth [10]

Question 2

Using any project of your choice, discuss how environmental and social appraisals can be carried out in order to determine the feasibility of a project. [20]

Question 3

Explain the following concepts used in project finances:

- a) Project benefits and revenue [10]
- b) Project costs [10]

Question 4

- a) Calculate the future value of \$50 000 invested for five years, compounded semi-annually at an interest rate of 10% [10]
- b) Find the present value of \$120 000 was invested for 6 years, at the rate of 8% being compounded quarterly [10]

Question 5

Explain the major components of the following project financial statements project

- a) Statement of financial position (Balance Sheet) [10]
- b) Statement of Cashflows [10]

Question 6

Evaluate the significance of Cost-Benefit Analysis in determining the feasibility of a project.

[20]

PRESENT VALUE TABLES

Years	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.893	0.877	0.870
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826	0.797	0.769	0.756
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751	0.712	0.675	0.658
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683	0.636	0.592	0.572
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621	0.567	0.519	0.497
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564	0.507	0.456	0.432
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513	0.452	0.400	0.376
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467	0.404	0.351	0.327
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424	0.361	0.308	0.284
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386	0.322	0.270	0.247