

NATIONAL OPEN UNIVERSITY OF NIGERIA 14/16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS SCHOOL OF MANAGEMENT SCIENCES OCTOBER 2013 EXAMINATION

Course Code: ENT 426.

Credit Unit: 2

Course Title: Investment Analysis.

Time Allowed: 2 Hours.

Instructions: 1. Attempt Question 1 and any other two (2)

questions.

2. Question 1 carries 30 marks while the other 2

questions carry 20 marks each.

3. Show all your calculations for appropriate marks.

Question 1 (Compulsory)

Discuss the following terms in relation to investment analysis.

- a) Sunk Cost
- b) Working Capital
- c) Opportunity Costs
- d) Excess Capacity
- e) Allocated Cost

Question 2

Galaxy Company Limited is considering investment in either of two projects. The Company's cost of capital is 12% and in the tax bracket of 35%. The projects have the following information.

Cost of Investment: Project A N500,000. Project B N450,000.

Expected net cash flows are as follows:

Year	Project A	Project B	Discount Factor
	Amount (N)	Amount	(N) 12%
0			1.0000
1	130,000	120,000	0.8929
2	140,000	230,000	0.7972
3	210,000	110,000	0.7118
4	150,000	100,000	0.6355
5	100,000	120,000	0.5674

Evaluate the viability of the two projects (Project A and Project B) using:

- (a) Net Present Value (NPV).
- (b) Profitability Index.

Question 3

Cost of proposed investment in Project A is N1,500,000 and that of Project B is N2,500,000, which are being considered by Oshodi Bottle Water Company Ltd for diversification. The expected cash flows from the investment are as given below.

Year	Project A (N)	Project B (N)
1	425,000	450,000
2	615,100	650,400
3	850,400	924,500
4	845,500	823,100
5	354,000	341,000
6	245,000	235,000

(a) Determine the number of years, on individual basis, it will take the investor to recoup the funds from the two projects and advise accordingly.

Year	Project A	Depre + other Costs
	Ň	$\overline{\mathbf{N}}$
1	425,000	140,000
2	615,100	200,100
3	850,400	425,400
4	845,500	345,500
5	354,000	104,000
6	245,000	105,000

(b) Determine the Average Rate of Return for Project A.

Question 4

Cost of investment is N135,000. The equipment of the project has operational life of 6 years. The written-down value of the equipment is N15,000 after 6 years. The company is in the tax bracket of 10%. The company's average cost of capital is 15%. The company depreciates equipment on a straight-line basis. Below are the estimated future earnings before depreciation and tax charges:

Year: 1 2 3 4 5 6 Amount: N35,000 N45,000 N60,000 N42,000 N35,000 N27,000

Determine the residual earnings based on above information.

Question 5

- (a) Distinguish between Risk and Uncertainty, with examples, in relation to investment.
- (b) List and evaluate five methods of treating Risk and Uncertainty in investment analysis.