

# NATIONAL OPEN UNIVERSITY OF NIGERIA 14/16, AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS SCHOOL OF MANAGEMENT SCIENCES 2013\_2 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 is compulsory and carries 30 marks while the other 2 Questions carry 20 marks each.3. Show all your calculations for appropriate marks.

## **Question 1 (Compulsory)**

Quotex 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:

Project A	Project B	Discount Factor	
Amount (N)	Amount (N)	12%	
		1.0000	
130,000	120,000	0.8929	
140,000	230,000	0.7972	
210,000	110,000	0.7118	
150,000	100,000	0.6355	
100,000	120,000	0.5674	
	Amount (N)  130,000  140,000  210,000  150,000	Amount (N) Amount (N)  130,000 120,000  140,000 230,000  210,000 110,000  150,000 100,000	

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

- (a) Net Present Value (NPV).
- (b) Profitability Index.
- (c) State four (4) Advantages of using NPV for evaluating Investment.

#### **Question 2**

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 Payback Period of the two projects and advise the firm on the proposed investment.

Project A	Depre + other Costs
Ň	N
425,000	140,000
615,100	200,100
850,400	425,400
845,500	345,500
354,000	104,000
245,000	105,000
	Ñ 425,000 615,100 850,400 845,500 354,000

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

## **Question 3**

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

Calculate the earnings after depreciation and taxes for the six years.

### **Question 4**

- (a) Differentiate between Risk and Uncertainty.
- (b) Mention and briefly explain five methods of treating Risk and Uncertainty in investment analysis.

### **Ouestion 5**

Write short notes on the following terms in relation to investment analysis.

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