



NATIONAL OPEN UNIVERSITY OF NIGERIA
Plot 91 Cadastral Zone Nnamdi Azikiwe Express Way, Jabi-Abuja
FACULTY OF MANAGEMENT SCIENCES
DEPARTMENT OF FINANCIAL STUDIES
2020_2 EXAMINATION

Course Code: BFN721

Credit Unit: 3

Course Title: INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT

Time Allowed: 2^{1/2} HOURS

Instructions:

- 1. Attempt Question 1 and any other three (3) Questions.**
 - 2. Question 1 is compulsory and carries 25 marks while the other Questions carry 15 marks each.**
 - 3. Present all your points in a coherent and orderly manner.**
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Q1

ABC Plc. is considering an investment which it intends to finance by the issue of new ordinary shares and debentures in a mix which will hold its gearing ratio approximately constant. The company has an issued share capital of 1 million ordinary shares of ₦1 each and also issued ₦700,000 8% debentures. The market price of the ordinary shares is ₦3.76 per share and the debentures are priced at ₦75. Dividends and interest are payable annually. An ordinary dividend has just been paid while the next installment of interest is payable in the near future. Debentures are redeemable at par in twenty years' time. A summary of the company's balance sheet as at 31 December 2019 is as follows:

	₦'000	
Fixed Assets	₦'000	
	1,276,000	
Current Assets	4,066,000	
Less: Current liabilities	<u>1,925,000</u>	
		<u>2,141,000</u>
		<u>3,417,000</u>
Financed by:		
Ordinary share capital	1,000,000	
Reserves	1,553,000	
Deferred taxation	164,000	
Debentures	<u>700,000</u>	
		<u>3,417,000</u>

Dividends and Earnings have been as follows:

Dividends	Earnings	Earnings
	(before tax)	(after tax)

	N'000	N'000	N'000
2014	200, 000	575,000	350, 000
2015	230, 000	723, 000	452, 000
2016	230, 000	682, 000	410, 000
2017	260, 000	853, 000	536, 000
2018	300, 000	906, 000	606, 000

The new investment which has the same risk characteristics as the existing projects, would require an immediate outlay of ₦1, 500,000, 000 and would generate an annual net cash inflow of ₦500, 000, 000 indefinitely.

You are required to:

- Calculate ABC Plc's Weighted Average Cost of Capital (WACC). (10 Marks)
- Discuss briefly four (4) any difficulties and uncertainties in your estimation. (5Marks)
- Prepare calculations showing whether or not acceptance of the new project is worthwhile. (5 Marks)
- Appraise the dividend policy of the company. (5 Marks)

Q2

	Microsoft	Dell	Alaska Air	Southwest Airlines	Ford Motor	General Motors	General Mills
Volatility (StDev)	37%	50%	38%	31%	42%	41%	18%
Correlation with:							
Microsoft	1.00	0.62	0.25	0.23	0.26	0.23	0.10
Dell	0.62	1.00	0.19	0.21	0.31	0.28	0.07
Alaska Air	0.25	0.19	1.00	0.30	0.16	0.13	0.11
Southwest Airlines	0.23	0.21	0.30	1.00	0.25	0.22	0.20
Ford Motor	0.26	0.31	0.16	0.25	1.00	0.62	0.07
General Motors	0.23	0.28	0.13	0.22	0.62	1.00	0.02
General Mills	0.10	0.07	0.11	0.20	0.07	0.02	1.00

From the table above you are required to:

- Find covariance between the returns for Alaskan Air and General Mills?
The volatility of a portfolio with
 - Equal amounts invested in these two stocks?
 - 20% invested in Alaskan Air and 80% invested in General Mills?
 - 80% invested in Alaskan Air and 20% invested in General Mills?

(7.5Marks)

b) Consider the following data. The risk-free rate is $r_f = 3\%$.

Stock	Expected Return	Volatility
Stock A	15%	40%
Stock B	7%	30%

- What is the minimum variance portfolio when $p_{AB} = 0$? What is its expected return and volatility?
- What is the minimum variance portfolio when $p_{AB} = 0.4$? What is its expected return and volatility?
- What is the minimum variance portfolio when $p_{AB} = -0.4$? What is its expected return and volatility?

(7.5Marks)

Q3

- A young engineer has a mortgage loan at a 12% interest rate, which she got some time ago, for a total of \$52,000. She has to pay 240 more monthly payments of \$534.88 each. As interest rates are going down, she inquires about the conditions under which she could refinance the loan. If the bank charges a new loan fee of 2% of the amount to be financed, and if the bank and the engineer agree on paying this fee by borrowing the additional 2% under the same terms as the new loan, what percentage rate would make the new loan attractive, if the conditions require her to repay it in 120 payments?

(7.5Marks)

- Milton Hotels Inc. stock is currently selling for \$20.75. A dividend of 35¢ per share is paid semiannually. The stock has increased in price by 5% annually for the last several years. Assuming the stock continue to increase in price at the same rate and does not increase the dividend amount, what is the IRR if an investor sells the stock after four years?
 - What do you understand by internal rate of return?

(7.5Marks)

Q4

- Trace the origin of the apex Bank (Central Bank of Nigeria). (6Marks)
- State and explain any five (5) the functions of Central Bank of Nigeria (5Marks)
- Clearly discuss the Policy Implementation and Criticism of CBN (4Marks)

Q5

- Discuss historical development of the Security and Exchange Commission (SEC) (5Marks)
- Mention any five (5) objectives of Security and Exchange Commission (SEC) (5Marks)
- State any five (5) functions of Securities and Exchange Commission (5Marks)

Q6

- Nigeria Economy requires boost in fund mobilization to enhance economic growth and development. List and discuss any five Money Market instruments in Nigeria. (5Marks)
- Mention any five (5) reasons for establishing the Nigerian Money Market (5Marks)
- State any five (5) functions of Money Market (5Marks)