



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESS WAY, JABI – ABUJA**  
**FACULTY OF MANAGEMENT SCIENCES**  
**DEPARTMENT OF FINANCIAL STUDIES**  
**2019 EXAMINATION**

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**COURSE CODE: BFN403**

**CREDIT UNIT: 3**

**COURSE TITLE: CAPITAL MARKET AND PORTFOLIO THEORY**

**TIME ALLOWED: 2<sup>1/2</sup>HRS**

**INSTRUCTIONS:**

- 1. Attempt Question One (1) and any other three (3) questions**
  - 2. Question 1 carries 25 marks, while the other questions carry 15 marks each.**
  - 3. Present all points in coherent and orderly manner**
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**1. (a)** Jelife Plc wishes to determine its historic beta coefficient in order to decide the cost of capital. Its financial manager has decided to use linear regression using a sample of 6 months data about the return on Jelife Plc ordinary shares and the market as a whole.

The sample data (Monthly Return) for the first 6 months are given below:

<b>Month</b>	<b>Market Index (%)</b>	<b>Wisdom's shares (%)</b>
1	+7	+4
2	+5	+3
3	-2	-5
4	0	-3
5	+1	+2
6	+2	+4

A dividend of 15k per share was paid by Jelife Plc in six months. The month-end price is shown as ex-dix.

**Required to:**

- i. Use the data above to calculate a beta value for Jelife Plc. **10marks**
  - ii. If the risk free rate of return is 8% per annum, calculate the required return on the shares of Jelife Plc. **5marks**
- 1. (b)** (i) Discuss any eight (8) limitations of CAPM. **8marks**  
(ii) Explain briefly how Arbitrage Pricing Theory has solved such problems. **2 marks**

2. (a) Explain Inflow and Outflow Transactions between nations **7marks**  
 (b) Explain what you understand by “cumulative provision” and “non-cumulative provision” in the payment of dividends to preferred stockholders. **8marks**

3. (a) Discuss any four (4) major types of risk to which a bond instrument is exposed. **8marks**  
 (b) Explain the meaning of “par value” and “market value” of common stock. **7marks**

4. (a) Enumerate and explain five (5) types of Common Stock. **10marks**  
 (b) Discuss sources of common stock value. **5marks**

5. (a) Justine is considering allocating his portfolio funds to the following securities Security:

	<b>Weight</b>	<b>Beta</b>
A	15%	0.85
B	10%	1.30
C	20%	1.181
D	25%	1.25
E	30%	0.70

If the risk free rate is 12% and the return on the market portfolio is 18%, **calculate:**

- i. Portfolio Beta **6marks**  
 ii. Expected Return on Jude's portfolio **4marks**  
 (b) Explain what you understand by Event Risk? **5marks**

6. (a) Given a security with an expected return of 9% and a market return of 12%. Also given that government security rate is 7%. Calculate the Beta factor. **10marks**  
 (b) Discuss what you understand by “current Income” **5marks**