



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**Plot 91, Cadastral Zone, Nnamdi Azikiwe Express Way, Jabi-Abuja**  
**Faculty of Management Sciences, Department of Financial Studies**  
**October/November Examination 2016**

**COURSE CODE: MBF843**

**COURSE TITLE: CAPITAL INVESTMENT AND FINANCIAL DECISIONS**

**CREDIT UNIT: 3**

**TIME ALLOWED: 2 HOURS 30MINUTES**

**Instructions:**

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

1a) Explain the term Standard Deviation and Variance 5 marks

b) Suppose a firm has to choose between two mutually exclusive projects that cost ₦193 million each. The following are the possible net cash flows of the project and their associated probabilities;

| <b>PROJECT X</b>  | <b>NCF</b>  | <b>PROJECT Y</b>   | <b>NCF</b>  |
|-------------------|-------------|--------------------|-------------|
| <b>PROBABILIT</b> | <b>N000</b> | <b>PROBABILITY</b> | <b>N000</b> |
| <b>Y</b>          |             |                    |             |
| 0.10              | 3,000       | 0.10               | 2,000       |
| 0.20              | 3,500       | 0.25               | 3,000       |
| 0.40              | 4,000       | 0.30               | 4,000       |
| 0.20              | 4,500       | 0.25               | 5,000       |
| 0.10              | 5,000       | 0.10               | 6,000       |

Determine the standard deviation and the coefficient of variation for each project and advise which of them is preferable. 20 marks

2. Explain any five parameters under which you could classify Investments. 15 marks

3. How would you group the decisions that firms make. Explain each of them briefly. 15 marks

4. Ebele Nigeria Ltd has the option of investing in any of the following three projects whose associated cash flows are presented thus:

| Year | Project I<br>Cash flow<br>N000 | Project II<br>Cash flow<br>N000 | Project III<br>Cash flow<br>N000 |
|------|--------------------------------|---------------------------------|----------------------------------|
| 0    | (15,000)                       | (15,000)                        | (15,000)                         |
| 1    | 6,000                          | 4,000                           | 3,000                            |
| 2    | 5,000                          | 5,000                           | 5,000                            |
| 3    | 4,000                          | 6,000                           | 4,000                            |
| 4    |                                |                                 | 3,000                            |
| 5    |                                |                                 | 2,000                            |
| 6    |                                |                                 | 1,000                            |

Required: Advise the company on which of the three projects to invest in (base your advice on the payback approach) 15 marks

5. A company runs a project for three years with the following distribution of returns in each year

| Year 1 |             | Year 2 |             | Year 3 |             |
|--------|-------------|--------|-------------|--------|-------------|
| Return | Probability | Return | Probability | Return | Probability |
| N000   |             | N000   |             | N000   |             |
| 10,000 | 0.1         | 20,000 | 0.4         | 10,000 | 0.3         |
| 12,000 | 0.6         | 30,000 | 0.6         | 16,000 | 0.5         |
| 16,000 | 0.3         |        |             | 20,000 | 0.2         |

The project will cost the company 42 Million Naira to establish. Calculate the expected NPV if the discount rate is 10% 15 marks

- 6a. In relation to capital budgeting, what is the difference between risk and uncertainty? 6 marks
- b) What are the steps in strategic financial decision - making? 9 marks