



**KABARAK UNIVERSITY**  
**UNIVERSITY EXAMINATIONS**

**2016/2017 ACADEMIC YEAR**

**FOR THE DEGREE OF BACHELOR OF EDUCATION (ARTS)**

**FNCE 220: BUSINESS FINANCE**

**DAY: TUESDAY**

**DATE: 11/04/2017**

**TIME: 4:00-6:00PM**

**STREAM: Y<sub>2</sub>S<sub>1</sub>**

---

**INSTRUCTIONS:**

- (i) The paper carries **FIVE** questions
- (ii) Answer **ONE and ANY OTHER TWO** the questions
- (iii) Marks are allocated at the beginning of each question
- (iv) Be precise and neat.

**QUESTION ONE** **(30 marks)**

- a) Name four finance functions or decisions. Briefly explain each one of them (8 marks)
  
- b) Your uncle has heard the term “agency conflict” used in discussions of corporate management, and he asks you about it.
  - i) What does the term mean? (2 marks)
  - ii) Briefly highlight any five (5) measures that would minimize agency problems between the owners and the management (10 marks)

**QUESTION TWO** **(20 marks)**

- a) Below is data from two projects meant for investment

Project	Expected Cash flow	Standard deviation
A	Ksh.400, 000	Kshs. 95,000
B	Kshs.980, 000	Kshs. 27,000

**Required:**

Use the above data to identify the more or less risky project between the two by estimating the coefficient of variation for each project and then advise the management accordingly

(3 marks)

b) A financial analyst has provided you with the following data relating to ABC Ltd's returns and market returns:

Probability	Returns	
	ABC Ltd	Market Return
0.2	18%	20%
0.3	16	14
0.1	10	12
0.2	6	10
0.2	8	11

**Required:**

Compute for both ABC Ltd and the Market Returns:

- i) The expected returns (2 marks)
- ii) The standard deviation (4 marks)
- iii) Coefficient of variation (2 marks)
- iv) Covariance (2 marks)
- v) The expected return of a portfolio investment in which 20 percent is in the ABC Ltd and 60 percent in market returns (2 marks)
- vi) The risk of a portfolio investment in which 20 percent is in the ABC Ltd and 60 percent in market returns (5 marks)

**QUESTION THREE****(20 marks)**

- (a) You bought a security at a price of sh.7800.35 and it will pay you sh.10, 000 after five years. Determine the interest rate (5marks)
- (b) Find the present value of following cash flow stream, discounted at 6%:  
Cash flows at the end of year for year 1 to 7: sh.10, 000, sh.20, 000, 20,000, sh20, 000, sh.200, 000, sh.0 and sh.100, 000 (7marks)
- (c) Determine the amount of money in a savings account at the end of five years, given an initial deposit of Shs 500,000 and a 12 percent annual interest rate when interest is compounded (i) annually, (ii) semiannually, and (iii) quarterly (6marks)

**QUESTION FOUR****(20 marks)**

- (a) Explain two advantages of internal rate of return (2marks)
- (b) Kericho Engineering Limited is considering the purchase of a new machine from two alternative machines; PURPLE and PINK, which will be available in the market. The cash flows of each machine are as follows:

Year	Cash flows	
	Purple (Sh.)	Pink (Sh.)
0	6,000,000	7,000,000
1	600,000	1,800,000
2	1,800,000	2,400,000
3	2,000,000	3,000,000
4	3,000,000	1,800,000
5	2,400,000	1,600,000

**Required**

Calculate for each project

- i) The payback period (3marks)
- ii) The Net Present Value (5marks)
- iii) Profitability Index (2marks)
- iv) The Internal Rate of Return (9marks)

**QUESTION FIVE****(20 marks)**

- (a) Using a well labeled diagram, distinguish between systematic and unsystematic risk (6marks)
- (b) Briefly explain why the co-variance of a security with the rest of a portfolio is a more appropriate measure of risk than the variance of the security? (4marks)
- (c) Explain the three steps for calculating the weighted average cost of capital (6marks)
- (d) Suppose a firm has a target debt-equity ratio of 1/3. The cost of debt is 10% and the cost of equity is 20%. Assume a 34% tax rate.

**Required:**

Determine WACC (4marks)