



**MACHAKOS UNIVERSITY**  
University Examinations for 2018/2019 Academic Year  
**SCHOOL OF BUSINESS AND ECONOMICS**  
**DEPARTMENT OF BANKING, ACCOUNTING & FINANCE**  
**SECOND YEAR SECOND SEMESTER EXAMINATION FOR**  
**BACHE**  
**LOR OF ECONOMICS AND FINANCE**  
**BACHELOR OF ECONOMICS**  
**BACHELOR OF COMMERCE**  
**BAC 204: BUSINESS FINANCE II**

**DATE: 30/4/2019**

**TIME: 8.30-10.30 AM**

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**INSTRUCTIONS:** Attempt Question One and any other Two Questions

**QUESTION ONE (COMPULSORY) (30 MARKS)**

- a) i) What is capital rationing and what is its significance to a corporation? (3 marks)
- ii) Explo Ltd is considering investing in a 10 year project that provides annual cash inflows of Kshs.10,000 and requires an initial investment of Kshs.61,450. Calculate the internal rate return of this project. (4 marks)
- b) BXM Ltd. Unprepared to invest more than 500m in the current year but has the following projects available to it.

Project	Initial Investment in Millions	NPV in Millions
A	100	15
B	150	29
C	140	31
D	210	22
E	180	36

Which of these projects should the Company invest in? (9 marks)

- c) The ordinary shares of a Company are currently trading at Shs.20 (ex dividend) each in the capital market. Next years dividend is expected to be Shs.1.4 per share and subsequent dividends are expected to grow at an annual rate of 5% of the previous year's dividend. What is the cost of equity? (4 marks)
- d) The following information below relates to Excel Ltd. for last year.

Description	Amount (in millions)
Purchase of raw materials	67
Usage of raw materials	65
Credit sales (of finished goods)	250
Cost of sales of finished goods	180
Average trade payables	14
Average raw materials inventories	12
Average work in progress	10
Average finished goods inventories	21
Average trade receivables.	47

Calculate the cash conversion cycle in days. (10 marks)

### QUESTION TWO (20 MARKS)

Zee Company is evaluating the following seven investment proposals. The company has capital expenditure ceiling of KShs 2 000,000 and therefore can accept just enough proposals. Cost of capital is 12%

Project	Cash outlay (Ksh.`000`)	NPV (KSh.`000`)
<b>O</b>	<b>100</b>	<b>18</b>
<b>P</b>	<b>500</b>	<b>80</b>
<b>Q</b>	<b>200</b>	<b>40</b>
<b>S</b>	<b>600</b>	<b>36</b>
<b>T</b>	<b>1 000</b>	<b>250</b>
<b>U</b>	<b>800</b>	<b>180</b>
<b>V</b>	<b>400</b>	<b>40</b>

You are **required**:

- a) To rank the proposals according to profitability index and indicate the group of proposals to be accepted. (10 marks)
- b) If projects T and U were mutually exclusive, would this change your answer to a) above? If YES indicate which projects would be accepted. If no why? (10 marks)

### QUESTION THREE (20 MARKS)

- a) What is capital budgeting and what is its significance in a firm? (3 marks)
- b) Bull and Crest Ltd. has the following investment projects to consider but is unable to make a decision. You have been approached to advise the Company on the best decision.

Cash Flows ( Ksh, '000')

Project	Year 0 KShs	Year 1 KShs	Year 2 KShs	Year 3 KShs	Year 4 KShs
A	-1,000	600	200	200	1,000
B	-1,000	200	200	600	1,000
C	-300	100	100	100	600
D	-300	0	0	300	600

#### Required

- i) Calculate the payback period for each project ( 4 marks )
- ii) If the standard payback period is 2 years, which projects would you recommend? (2 marks)  
Would your answer change if the standard pay back period was 3 years? (2 marks)
- iii) If the cost of capital is 10%, compute the discounted pay back period for each project.  
Which projects would you recommend if the standard pay back period was:  
2 years (2 marks)  
3 years (2 marks)
- iv) Compute the NPV of each project. Which projects would you recommend and why? (5 marks)

### QUESTION FOUR (20 MARKS)

- a) For each of the following companies described below, state whether and why you would expect it to have high or low dividends payments out ratio:
- A company with a large proportion of inside ownership, all of whom are high income individuals (2 marks)
  - A growth company with an abundance of good investment opportunities (2 marks)
  - A company experiencing ordinary growth that has high liquidity and much unused borrowing capacity. (2 marks)
  - A dividend-paying company that experience an unexpected drop in earnings from trend. (2 marks)
  - A company with volatile earnings and high business risk. (2 marks)

- b) Malili Flyers Ltd. uses a component which it buys from a supplier in its manufacturing process. The estimated annual usage is 23,000 units and these are used fairly steadily throughout the year. It is estimated that the various inventories holding costs amount Shs.1.5 per unit per year. Investigations indicate that it costs about Shs.50 to process each order for the component. Experience shows that delivery always occurs within one week of placing an order.

**Required:**

- (i) Calculate the Economic Order Quantity of the Component. (6 marks)
- (ii) Determine what inventories level the order should be placed in order to be confident that delivery would occur before the existing inventories of the components is all used. (4 marks)

**QUESTION FIVE (20 MARKS)**

- a) Explain the following Dividend theories:
- i) Dividend Irrelevance Theory
  - ii) Bird-In-The-Hand Theory
  - iii) Tax Preference Theory
  - iv) Clientele Effect
  - v) Information Content Hypothesis. (10 marks)

- b) Fortunate Ltd. capital structure (taken from the financial statement position) is as follows:

	Millions Shillings
Ordinary shares of Shs.10 each	8
10% preference shares of Shs.20 each	5
Reserves	6
12% loan notes	10

The Business pays corporation tax at the rate of 20% and is expected to earn a consistent annual profit before interest and tax of Shs.9Million. The current market prices of the shares are:

Preference Shares	Shs.13
Ordinary Shares	Shs.76

The loan notes are irredeemable and have a market price Value of Shs.2,000 per Shs.2,000 nominal value.

**Required:**

- Calculate the Weighted Average Cost of Capital (WACC) (10 marks)