

UNIVERSITY OF SWAZILAND
DEPARTMENT OF ACCOUNTING AND FINANCE
SUPPLEMENTARY EXAMINATION PAPER JULY 2018

PROGRAMME : Bachelor of Commerce

YEAR OF STUDY : Year 4 (Full Time/Part Time)

TITLE OF PAPER : CORPORATE FINANCE II

COURSE CODE : AC426/ AC514 (S) JULY 2018

TOTAL MARKS : 100 MARKS

TIME ALLOWED : THREE (3) HOURS

- INSTRUCTIONS
- 1 This paper consists of 5 numbered pages, including this page and Appendix A which contains useful formulae.
 2. There are five (5) questions, ANSWER all.
 - 2 Begin the solution to each question on a new page.
 - 3 The marks awarded for a question are indicated at the end of each question.
 - 4 Show all the necessary workings.
 - 5 Round off all prices to the nearest cent, values to the nearest rand and decimalized interest rates to four decimal places, and decimalized weightings to four decimals.

Note: You are reminded that in assessing your work, account will be taken of accuracy of the language and general quality of expression, together with layout and presentation of your answer.

THIS PAPER MUST NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR OR SUPERVISOR.

SPECIAL REQUIREMENTS: FINANCIAL CALCULATOR

Question 1 [15 marks: 27 minutes]

Given the stiff competition JVC Inc. has faced from its competitors such as Samsung and Sony, the company wishes to expand its product offer to include new advanced television sets with 4K video capability. The production of these new television sets requires the building of a new factory which will cost E9 000 000. JVC's board has decided to raise the required funds through a rights offer where each shareholder will be entitled to buy 2 new shares for every 5 shares currently held.

Required:

If the current market price of JVC's shares is E150, and JVC wants to issue 75 000 new shares:

- (a) Calculate the subscription price per share. (3 marks: 3 minutes)
- (b) Determine the number of existing shares. (5 marks: 4.5 minutes)
- (c) Calculate the ex-rights price and the value of each right. (7 minutes: 6 marks)

Question 2

With the aid of a fully-labelled diagram, explain the nature of financial distress costs and how they affect the value of the firm assuming there are corporate taxes.

[20 marks: 36 minutes]

Question 3 [30 marks: 54 minutes]

Phakama Manufacturing Limited wish to measure their weighted average cost of capital. They have gathered the following data:

- Equity: The firm has 5 million shares outstanding, currently trading at E20.00 per share on the JSE. Its historic beta is 1.5.
- Debt: The firm has ten thousand semi-annual 10% coupon bonds trading at 80% of par, with 5 years to maturity. The par value is E1000 each.
- Preference shares: The firm has two issues of preference shares
1st issue: Two hundred thousand 10% preference shares with a par value of E10 and currently trading at E11.
2nd issue: Fifty thousand preference shares with a dividend yield of 5% after paying a dividend of E2 per share.

The current return on the market is 15% and the market risk premium is 9%. Corporate tax is 40%.

Required:

- (a) Calculate the firm's cost of equity. (4 marks: 7 minutes)
- (b) Calculate the cost of the firm's preference shares. (13 marks: 23 minutes)
- (c) Calculate the cost of the firm's after-tax cost of debt. (5 marks: 9 minutes)
- (d) Calculate the firm's Weighted Average Cost of Capital (WACC). (9 marks: 14 minutes)

Question 4 [20 marks: 36 minutes]

Paramount Investments has one million shares outstanding. The Board of Directors want to change the company's policy of a paying of E 4 000 000 per year for the each of the next two years. Under the proposed policy company wants to pay E5 000 000 next year and E2 850 000 the year after.

Mr Ncube, a 25% shareholder in Paramount Investments is not happy with the proposed policy change because he prefers the old policy. His close friend Mr Smit advised him to use homemade dividends to solve his problem. Mr Ncube has approached you seeking advice about homemade dividends. His required return on investments is 15%.

Required

- (a) Define the term "homemade dividend." (3 marks: 3 minutes)
- (b) Calculate Mr Ncube's dividend income under the old policy. (8 marks: 7 minutes)
- (c) Show his income under homemade dividends. (9 marks: 7 minutes)

Question 5 [15 marks: 27 minutes]

Part A

You would like to invest in Company X but have to wait for your bonus in order to be able to do so. You will receive your bonus in two months' time. Call options expiring in 2 months' time on Company X shares have a strike price of E80 and are available for a premium of E5.25, while put options with the same strike price are selling for E4.75.

Required:

(a) Identify the action you could take today, and calculate your resultant profit/loss if the underlying share price in two months' time is E100.

(5 marks: 9 minute)

(a) Calculate the price that you need the underlying asset to sell for at maturity, in order to break-even.

(3 marks: 5 minutes)

Part B

Sushi Setting is a restaurant which uses a large amount of rice. The owner of Sushi Setting has a good relationship with a local framer whose main crop is rice. If you and this farmer agree to set up a contract to purchase/sell rice, name the type of contract you would use. Furthermore, explain which party would assume the long/short position, and how this contract would help to address any price concerns they may have.

(7 marks: 13 minutes)

Round off all calculations to two decimal places (four if in decimalized format), and all values to the nearest cent.

APPENDIX A

- $R_E = \frac{D_0 (1+g)}{P_0} + g$
- $R_P = \frac{D}{P_0}$
- $R_E = R_F + \beta_E \times (R_M - R_F)$
- Bond value = $C \times \frac{1 - 1/(1+r)^t}{r} + F / (1+r)^t$
- $WACC = \left(\frac{E}{V} \times R_E \right) + \left(\frac{P}{V} \times R_P \right) + \left(\frac{D}{V} \times R_D \times (1 - T_c) \right)$
- Value of a right = $\frac{\text{Cum-rights share price} - \text{subscription price of new shares}}{N+1}$
- Ex-rights = $\frac{1}{N+1} \times [N \times \text{Cum rights share price}] + \text{subscription price of new shares}$
- Number of new shares = $\frac{\text{Funds to be raised}}{\text{Subscription price}}$
- Number of rights needed to buy a share = $\frac{\text{Old Shares}}{\text{New Shares}}$
- $V_L = \frac{PBIT (1 - T_c)}{R_U} + \frac{T_c R_D D}{R_D}$
- $V_U = \frac{PBIT (1 - T_c)}{R_U}$
- $R_E = R_U + (R_U - R_D) D / E (1 - T_c)$
- $YTM = \frac{i + (F_d - V_d) / n}{(F_d + 2V_d) / 3}$