

University of Eswatini
Department of Accounting
Supplementary / Re-sit Exam Paper - Semester - I

Programme of Study : Bachelor of Commerce
Year of Study : Year Three / Level Four and Five
Title of Paper : Intermediate Corporate Finance
Course Code : ACF319/AC322/AC415
Time Allowed : 3 Hours.

- Instructions:
1. Total number of questions on this paper is four (4).
 2. Answer all the questions.
 3. The marks awarded for a question / part is indicated at the end of each question / part of question.
 4. Where applicable, submit all workings and calculations on the answer sheet alongside the case.
 5. Calculations are to be made to two decimal places of accuracy unless otherwise instructed.

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

Special requirement : **Financial Calculator**

This paper is not to be opened until permission has been granted by the invigilator.

QUESTION 1:

- a. Compute the present value of an annuity that pays E500 for ever, if the opportunity cost rate is i) 5 per cent, ii) 10 per cent. Why does the present value decrease as the opportunity cost increases? **(3 marks)**
- b. Joyce's Bank advertises a savings investment that pays 6 per cent compounded monthly. What is the investment's i) annual percentage rate (APR) and ii) effective annual rate (EAR)? **(4 marks)**
- c. The Times Swaziland reports that the yield on a nine-month Treasury bond is 2.5 per cent, the yield on a three-year treasury bond is 3.1 per cent and the yield on a 10-year treasury bond is 4.1 per cent. Although, no liquidity premium is associated with Treasury securities, there is a maturity risk premium (MRP) for treasuries with maturities equal to one year or greater. What is the MRP? **(5 marks)**
- d. Swink Electric, Inc. has just developed a solar panel capable of generating 200 per cent more electricity than any solar panel currently on the market. As a result, Swink is expected to experience a 15 per cent annual growth rate for the next five years. When the five-year period ends, other firms will have developed comparable technology, and Swink's growth rate will slow to 5 per cent per year indefinitely. Stockholders require a return of 12 per cent on Swink's stock. The firm's most recent annual dividend (D_0), which was paid yesterday, was E1.75 per share.

Required:

- i) Calculate Swink's expected dividends for the next five years. (6 m)
 - ii) Calculate the value of the stock today? (12 m)
- (18 marks)**
Total (30 marks)

QUESTION 2:

- a. The Severn Company's bonds have four years remaining to maturity. Interest is paid annually; the bonds have a E1,000 par value, and the coupon interest rate is 9 per cent.

Required:

- i) Compute the yield to maturity for the bonds if the current market price is (1) E829 or (2) E1,104. **(2 m)**
 - ii) Would you pay E829 for one of these bonds if you thought that the appropriate rate of interest was 12 per cent—that is, if $r_d = 12\%$? Explain your answer. **(3m)**
- (Total 5 marks)**

- b. Suppose Ford Motor Company sold an issue of bonds with a 10-year maturity, a E1,000 par value, a 10 per cent coupon rate, and semi-annual interest payments.

Required:

- i) Two years after the bonds were issued, the going rate of interest on bonds such as these fell to 6 per cent. At what price would the bonds sell? (4m)
- ii) Suppose that the interest rate remained at 6 per cent for the next eight years. What would happen to the price of the Ford Motor Company bonds over time? (1 m)

Total (5 marks)

- c. The Inyatsi Corporation is trying to determine the effect of its inventory turnover ratio and days sales outstanding on its cash flow cycle. Last year, Inyatsi's sales (all on credit) were E 160,000 and its cost of goods sold were 80 per cent of sales. Inventory was turned over eight times during the year and the accounts receivable turnover was 8. Inyatsi's payables deferral period is 25 days.

Required:

- i) Calculate Inyatsi's cash conversion cycle (2 m)
- ii) Compute the average balance in accounts receivable, accounts payable and inventory. (4 m)

Total (6 marks)

- d. Currently the return on Eswatini Government T-bills is 3 per cent, and the expected return on ESX All-share Index is 8 per cent. What is the expected return of the following three-stock portfolio

Amount invested	Beta
E 300,000	1.0
450,000	0.2
250,000	2.5

(4 marks)

Grand Total (20 marks)

QUESTION 3:

The manager of Melkerns Aluminium provided the following details for the purpose of estimating working-capital required for the current financial year. Production during last year was 150,000 units. It was estimated that the same level of production would be continued in the current financial year too.

The expected ratios of the costs to selling prices are, raw materials 60 per cent, direct wages 12 per cent, Over-heads 14 per cent. Raw materials are expected to remain in store for an average of 2 months before issue to production and each unit is expected to be in process for 30 days (assume a 50 per cent completion stage), the raw materials being fed into the pipeline immediately and the labour and over-head costs accruing evenly during the month. Finished goods will stay in the ware house awaiting dispatch to customers for approximately 2 months.

Credit allowed by suppliers of raw materials is 45 days from the date of delivery of raw materials. Credit allowed to customers is 2 months from the date of dispatch. Selling price is E8 per unit. There is a regular production and sales cycle. Wages and over-heads are paid on the 1st of each month for the services rendered in the previous month. Merkerns Aluminium normally holds E 100,000 cash in hand.

Required:

Forecast the working capital required for the current year. **(25 marks)**

QUESTON 4:

Write short notes on the following:

- i) Systematic and Unsystematic Risks (Graph is essential) **(6 marks)**
- ii) Interest rate levels and stock prices **(6 marks)**
- iii) Sources of short term financing **(6 marks)**
- iv) Working capital financing policies (Graphs are essential) **(7marks)**

Total (25 marks)

End of exam question paper