

UNIVERSITY OF FORT HARE

**FINANCIAL MANAGEMENT
BEC313/BEC313E
JUNE EXAM**

DEGREE EXAMINATIONS

JUNE 2023

.....

Time: 3 Hours
Subject: BEC313/BEC313E
Marks: 100

This paper consists of 11 pages including the cover page

Internal Examiners

**Prof O.A. Oni
Dr E.C. Rungani**

External Examiner

Dr O. Dzomonda

INSTRUCTIONS

- 1. Answer all questions in section A and any three questions in section B.**
- 2. For section A please use the multiple choice answer sheet attached in the question paper.**
- 3. On completion, please hand in your answer sheet together with your examination script.**
- 4. Write clearly and legibly.**
- 5. Round up final answers to two decimal places where applicable.**

SECTION A: THIS SECTION IS COMPULSORY

QUESTION 1 MULTIPLE CHOICE QUESTIONS (25 MARKS)

1. Which of the following business forms have a limited lifespan, and when one of the associates dies, leaves, or a new associate becomes part of the business entity, a new business entity then has to be formed?

- a) Private company
- b) Sole proprietorship
- c) Partnership
- d) Close corporation

2. Financial markets where the buyer and seller of securities are brought together and the transaction takes place are known as:

- a) Dealer market
- b) Money market
- c) Capital market
- d) Auction market

3. The current asset and current liabilities in the balance sheet represents the:

- a) Capital budgeting decision
- b) capital structure decision
- c) Working capital management decision
- d) Equity decision

4. The financial statement that shows the financial position of an enterprise at a particular point in time is the:

- a) Statement of cash flows.
- b) Statement of comprehensive income.
- c) Balance Sheet
- d) Statement of shareholders' equity

5. Ezweni Limited is considering replacing an old grinding machine with a new technologically advanced grinder. The new grinder will cost R120 000 including installation costs. If the new grinder is depreciated over 3 years straight line, what will be the carrying amount of the grinder if Ezweni Limited decides to sell the grinder at the end of the second year of its use?

- a) R20 000
- b) R40 000
- c) R60 000
- d) R80 000

6. Gearco Ltd has total assets to the value of R10 000, and obtained a long-term loan at 5% interest to finance 40% of its total capital requirement. The company's profit after tax amounts to R3 000. Based on this information, the company is exposed to:

- a) Positive financial gearing, since $ROA > RD$.
- b) Positive financial gearing, since $ROA < RD$.
- c) Negative financial gearing, since $ROA > RD$.
- d) Negative financial gearing, since $ROA < RD$.

7. What is the rate of interest paid by bond issuers on the bond's face value?

- a) Real rate
- b) Inflation rate
- c) Nominal rate
- d) Coupon rate

8. Anna is going to deposit \$500 into an account that has an annual interest rate of 8% compounded quarterly. How much will she have at the end of one year?

- a) \$541.22
- b) \$537.68
- c) \$546.93
- d) \$538.15

9. If Phil has a \$100,000 bond with a 7% interest rate, compounded annually, how much will he have in 8 years?

- a) \$163,452.83
- b) \$170,978.42
- c) \$149,867.49
- d) \$171,818.62

10. Your company has a cost of capital of 10 percent. If the following projects are mutually exclusive, and you only have the following information, which project should you accept?

	Project A	Project B	Project C	Project D
Payback (years)	1	5	2	5
IRR	18%	20%	20%	12%
NPV (Millions)	R40	R75	R35	R100

- a) Project A
- b) Project B
- c) Project C
- d) Project D

11. Mpumalanga Construction is considering an investment project which has the following cash flows:

Year	Cash flow
0	-R1 000
1	R 400
2	R 300
3	R 500
4	R 400

The company's WACC is 10 per cent. What is the project's payback, internal rate of return, and net present value?

- a) Payback = 2.4, IRR = 10.00%, NPV = R600.
- b) Payback = 2.4, IRR = 21.22%, NPV = R260.
- c) Payback = 2.6, IRR = 21.22%, NPV = R300.
- d) Payback = 2.6, IRR = 21.22%, NPV = R260.

12. Depreciation is added back to profit when arriving at the cash flow from operating activities because?
- a) Depreciation is only an estimated amount
 - b) Depreciation does not affect profit
 - c) Depreciation only affects the balance sheet not the profit
 - d) Depreciation is not an expense
13. The situation that is most likely to exist if a project is accepted is known as the ... scenario.
- a) pessimistic
 - b) optimistic
 - c) expected
 - d) realistic
14. The purpose of scenario analysis is best described as the ...
- a) evaluation of all possible cash flow forecasts
 - b) evaluation of all possible contingencies
 - c) close analysis of highly negative net present value projects
 - d) development of a range of potential outcomes from a particular project
15. The specified date on which the principal amount of a bond is payable is referred to as which one of the following?
- a) coupon date
 - b) yield date
 - c) Maturity
 - d) dirty date
16. Real rates are defined as nominal rates that have been adjusted for which of the following?
- a) Inflation
 - b) default risk
 - c) accrued interest
 - d) interest rate risk

17. If the intrinsic value of a share exceeds its market value, investors should:
- a) do nothing as the share is in equilibrium.
 - b) buy the share, as it is undervalued.
 - c) sell the share, as it is undervalued.
 - d) buy the share, as it is overvalued.
18. You wish to invest in preference shares issued by the Futbol Feva Company. These shares have a par value of R100 and currently sell for R120. They offer investors a 5 per cent annual coupon. What is your required rate of return?
- a) 4,17%
 - b) 5,00%
 - c) 10,00%
 - d) 24,00%
19. The MAXShare Company has a P:E ratio of 12 times. This means:
- a) Investors are willing to pay R12 for every R1 of *reported* earnings.
 - b) Investors are willing to pay R12 for every R1 of *expected* earnings.
 - c) Investors are willing to pay R12 for every R1 of reported cash flow.
 - d) Investors are willing to pay R12 for every R1 of EBIT (earnings before interest and tax).
20. The systematic risk principle states that the expected return on a risky asset depends only on which one of the following?
- a) Diversifiable risk
 - b) Asset-specific risk
 - c) Market risk
 - d) Unsystematic risk
21. Risk of two securities with different expected return can be compared with
- a) Coefficient of variation
 - b) Standard deviation of securities
 - c) Variance of Securities
 - d) None of the above

22. An entity is expected to pay a dividend of R10,50 per share in one year's time. The earnings and dividends are expected to grow at a rate of 7% forever. If the current market price of the ordinary shares is R60, calculate the cost of equity.
- a) 25,7%
 - b) 16,4%
 - c) 24,5%
 - d) 18,73%
23. The preference shares of an entity pay an annual dividend of R8 per share. Calculate the cost of the preference shares if the par value of the shares is R100 and the shares are currently trading at a market price of R110 per share. The tax rate is currently 28%.
- a) 8,00%
 - b) 5,24%
 - c) 7,27%
 - d) 5,76%
24. In calculating the proportional amount of equity financing employed by a firm, we should use:
- a) The common stock equity account on the firm's balance sheet.
 - b) The sum of common stock and preferred stock on the balance sheet.
 - c) The book value of the firm.
 - d) The current market price per share of common stock times the number of shares outstanding.
25. When a company's dividend policy changes, investors could adjust their shareholding accordingly. This refers to:
- a) information content
 - b) dividend declaration
 - c) clientele effect
 - d) share price movement

SECTION B: ANSWER ANY 3 QUESTIONS

QUESTION 2 (25 MARKS)

The following information relates to two capital expenditure projects. Because of capital rationing, only one project can be accepted.

	Project A	Project B
Initial cost	R800 000	R920 000
Expected scarp value	R40 000	R60 000
Expected net cash inflows:	R	R
End of year 1	320 000	400 000
2	280 000	280 000
3	260 000	200 000
4	240 000	200 000
5	220 000	200 000

The company estimates its cost of capital at 12%. Depreciation is calculated using the straight line method.

Required

Calculate the following for both projects

- 2.1 Accounting rate of return (4)
 - 2.2 Payback period (6)
 - 2.3 Net present value (NPV) (8)
 - 2.4 Internal rate of return (IRR) (7)
- (25)**

QUESTION 3 (25 MARKS)

Sea Cable industries is looking at a new machine with an installed cost of R 4 000 000. This cost is depreciated straight line to zero over the project's 5 year life, at the end of which the machine can be scrapped for R200 000. The machine will save the firm R800 000 per year in the pretax operating costs, and the system requires an initial investment in net working capital of R100 000. If the tax rate is 35% and the discount rate is 15 %.

Required

Calculate the following:

- 3.1 OCF for the project (5)
 - 3.2 NPV of the project (8)
 - 3.3 Payback period of the project (6)
 - 3.4 IRR of the project (6)
- (25)**

QUESTION 4 (25 MARKS)

The directors of Thor Limited have appointed you as their financial consultant. They are considering new investment projects and need you to calculate the cost of capital for the company.

The present capital structure is as follows;

2 000 000 ordinary shares with a par value of R1.00 per share. These shares are currently trading at R2.50 per share and the latest dividend paid is 40 cents. An average dividend growth of 9% is maintained.

1 500 000 8% R2.00 preference shares, with a market value of R1.80 per share.

R10 000 000 non- distributable reserves

R2 000 000 7% debentures due in 6 years time and the current yield to maturity is 10%, and R1 000 000 15% bank loan.

Additional information:

The company has a beta of 2.1 a risk free rate of 7% and a return of market of 16%. The company tax rate is 30%.

Required

4.1 Calculate the weighted average cost of capital using Gordon growth model to calculate the cost of equity. (11)

4.2 Calculate the adjusted weighted average cost of capital using capital asset pricing model as the cost of equity. (14)
(25)

QUESTION 5 (25 MARKS)

5.1 Assume the total cost of a tertiary education will be R75 000 when your child enters university in 18 years. You presently have R7 000 to invest. What rate of interest must you earn on your investment to cover the cost of your child's tertiary education? (5)

5.2 Suppose you have celebrated your 19th birthday. A rich uncle set up a trust fund for you that will pay you R100 000 when you turn 25. If the relevant discount rate is 11 percent, how much is the fund worth today. (5)

5.3 You plan to make a series of deposits in an interest bearing account. You will deposit R1000 today, R2000 in two years, and R8000 in five years. If you withdraw R3000 in three years and R5000 in seven years, how much will you have after eight years if the interest rate is 9%? (assume annual compounding). (5)

5.4 A Telkom company bond carries an 8% coupon, paid semi-annually. The par value is R1000, and the bond matures in six years. If the bond currently sells for R911.37, what is its yield to maturity? (5)

5.5 Abbey Fish Company will pay a R5.00 per share dividend next year. The company pledges to increase its dividend by 3% per year indefinitely. If you require a 16% return on your investment, how much will you pay for the company's shares today? (5)

(25)

Multiple choice answer sheets

Surname and initials.....

Student number

--	--	--	--	--	--	--	--	--

PLEASE MARK THE ANSWER WITH AN X

	A	B	C	D
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				