

FACULTY/COLLEGE	COLLEGE OF BUSINESS AND
	ECONOMICS
SCHOOL	SCHOOL OF ACCOUNTANCY
DEPARTMENT	ACCOUNTANCY
CAMPUS(ES)	APK
MODULE NAME	FINANCIAL MANAGEMENT 1B
MODULE CODE	FNM1B01/BSR1B01
SEMESTER	SECOND
ASSESSMENT OPPORTUNITY,	FINAL ASSESSMENT OPPORTUNITY
MONTH AND YEAR	21 NOVEMBER 2019

ASSESSMENT DATE	21 November 2019	2	
ASSESSOR(S)	Mrs R van Gaalen Ms A Mhlongo Mrs C Krull		
MODERATOR(S)	Mrs M McGill		
DURATION	2 hour 10 minutes (130 minutes)	100	
NUMBER OF PAGES OF QUESTION PAPER (Including cover page)			18

INFORMATION/INSTRUCTIONS:

- You are allowed 10 minutes reading time before the assessment begins during which you should read the question paper and, if you wish, highlight and/or make notes on the question paper. However, you will not be allowed, under any circumstances, to open the answer book and start writing or use your calculator during this reading time.
- This paper consists of 18 pages (including this page).
- Answer ALL questions in the answer book provided.
- Silent, non-programmable calculators may be used, unless otherwise instructed.
- Round all answers to TWO decimal places.

(1)

SECTION A 20 MARKS

1 mark each

REQUIRED:

Answer the following questions by choosing the correct answer. Please indicate the **letter** you have chosen as your answer next to the correct question number on the <u>answer book</u> that has been provided to you.

- **1.** Financial managers are responsible for decisions that maximize share price and shareholder's wealth. Identify which of the following is/are component/s of shareholder's wealth?
 - A. Return
 - B. Capital growth
 - C. Cash distributions
 - D. All of the above are correct
- 2. Financial strategy formulation is influenced by a number of external constraints including government and regulation, economic and the new economic environment constraints. Identify which of the following form part of the economic constraints?
 - A. Corporate governance
 - B. Supply and demand
 - C. Globalisation
 - D. Taxation (1)
- 3. Identify which of the following support an organisation's strategy?
 - A. Aims and objectives
 - B. Mission statement
 - C. Trade-offs
 - D. Goals (1)
- **4.** Identify which of the following statements is FALSE?
 - A. Potential benefits from diversification arise when correlation is less than + 1.
 - B. If the correlation coefficient were 0, a zero variance portfolio could be constructed.
 - C. If the correlation coefficient were -1, a zero variance portfolio could be constructed.
 - D. The lower the correlation coefficient the greater the potential benefits from diversification.

(1)

(1)

- **5.** According to the risk and return trade-off concept, as we add more assets to a risky portfolio, we expect to reduce the portfolio's:
 - i. unsystematic risk
 - ii. systematic risk
 - iii. overall risk
 - A. i only
 - B. iii only
 - C. i and ii

D. i and iii (1)

- **6.** Identify which one of the following statements concerning interest rates is CORRECT:
 - A. The guoted rate is the same as the effective annual rate.
 - B. The effective interest rate is never more than the nominal interest rate.
 - C. An investor will prefer an investment that offers more frequent compounding.
 - D. Banks will always quote the relevant nominal interest rate to a client. (1)
- 7. Identify the number of statements that are correct:
 - The future value of cash flows can be determined through the process of compounding
 - The cost of your cellphone included in your monthly Vodacom account is an example of a perpetuity.
 - The rent of your flat payable on the 1st of each month is an example of a normal annuity.
 - A. One statement is correct.
 - B. Two statements are correct.
 - C. Three statements are correct.
 - D. None of the statements are correct. (1)
- **8.** Consider the following statements regarding value:

Statement 1

Value is what a present owner of an instrument asks to transfer the ownership to the new owner.

Statement 2

Value is the future benefit that the item will derive.

Select the correct answer:

- A. Both statements are TRUE
- B. Both statements are FALSE
- C. Statement 1 is TRUE and statement 2 is FALSE
- D. Statement 1 is FALSE and statement 2 is TRUE

- A. future value of the share
- B. present value of the share
- C. coupon payment

D. yield to maturity

(1)

- **10.** The value of a bond or debenture is equal to the sum of the...
 - A. Present value of coupon payments and nominal value
 - B. Yield to maturity values and coupon payments
 - C. Present values and future values
 - D. None of the above

(1)

- 11. Identify which of the following statements are true regarding cost of equity and cost of capital:
 - Cost of equity means the return expected by shareholders from their investment in the business
 - ii. Cost of capital is a weighted average of the returns expected by all providers of capital to the organization
 - iii. Cost of capital refers to the opportunity cost of making a specific investment.
 - iv. Cost of capital is a decision-making tool that is used to evaluate future projects
 - A. ii and iii
 - B. ii and iv
 - C. All of the above are correct
 - D. None of the above are correct

(1)

- **12.** Projects that do not compete with one another in terms of functionality and can all be accepted provided that they meet decision criteria are considered to be...
 - A. mutually exclusive
 - B. independent
 - C. dependent
 - D. profitable

(1)

- **13.** The Net Present Value (NPV) method is considered to be a superior valuation method as it considers risk, cash flows and time value of money. When making a decision between mutually exclusive projects, financial managers must choose projects that have the...
 - A. highest NPV, provided that it is less than 0
 - B. highest NPV, provided that it exceeds 0
 - C. lowest NPV, provided that it exceeds 0
 - D. positive NPV, provided that it exceeds 0

(1)

Use the following information to answer question 14-16:

Blockout 50 is a new sunblock that is manufactured in SA specifically for the sunny conditions of the country. During the summer months, the demand for Blockout 50 increases significantly, which results in higher production volumes.

- **14.** Identify which ONE of the following statements regarding manufacturing cost in the summer months is correct.
 - A. Variable cost per unit will increase
 - B. Fixed cost per unit will decrease
 - C. Variable cost will decrease in total
 - D. Fixed cost in total will decrease

(1)

- **15.** A generator is used in times of load shedding so that the manufacturing process is not interrupted. The cost of petrol for the generator that is used in times of load shedding can be classified as a ...
 - A. fixed manufacturing cost
 - B. variable manufacturing cost
 - C. fixed non-manufacturing cost
 - D. variable non-manufacturing cost

(1)

- **16.** Identify which of the following is NOT included in the product cost of Blockout 50?
 - A. The overtime cost of workers during the summer months.
 - B. The electricity cost of the machines used in the manufacturing process.
 - C. Cost of the research and laboratory tests conducted before the sunblock was registered and approved for commercial use and sale.
 - D. The cost of the lotion and chemicals used for the sunblock.

(1)

(1)

- **17.** Identify which ONE of the following will NOT be relevant when making capital investment decisions?
 - A. Cash flows
 - B. Sunk costs
 - C. Opportunity costs
 - D. None of the above

(1)

- **18.** The weighted average method of inventory valuation...
 - A. is not acceptable in terms of GAAP.
 - B. provides an income statement perspective.
 - C. is subject to minimal manipulation by management action.
 - D. might understate the cost of sales during periods of inflation.
- **19.** Energy 4 Africa is a coal producing manufacturing plant. They are extremely busy during the May to July winter period in South Africa. As a result, supervisors and cleaners work overtime during the winter period. The overtime cost of the supervisor and cleaners can be classified as:
 - A. Direct labour costs
 - B. Manufacturing overheads
 - C. Administration costs
 - D. None of the above (1)
- **20.** Identify which of the following components are included in calculating the total labour cost to an employer:
 - i. Gross wages or salary
 - ii. Annual bonuses
 - iii. Income tax payable by employees
 - iv. Employer's contribution to pension fund and medical aid
 - v. SDL Levy
 - A. i, ii and iii
 - B. i. ii and iv
 - C. i, ii, iii, and iv
 - D. i, ii, iv and v

End of Section A

SECTION B [40 MARKS]

2 marks each

REQUIRED:

Answer the following questions by choosing the correct answer. Please indicate the **letter** you have chosen as your answer next to the correct question number on the <u>answer book</u> that has been provided to you.

21. Consider the following regarding the University of Johannesburg (UJ)...

"Inspiring its community to transform and serve humanity through innovation and the collaborative pursuit of knowledge."

The statement can be classified as:

- A. UJ's vision
- B. UJs objectives
- C. UJ's mission statement
- D. UJ's critical success factors

(2)

- 22. After completing your degree, you and your best friend decided to develop an App that will help SMEs with their bookkeeping and basic financial management. The development costs amounted to R775 000 and you expect to make a profit of R20 500 per month for 12 months after expenses of R6 500 have been paid. At the end of the first year, the value of the App is R820 000. Identify which of the following amounts will be considered the 'TREE' of their investment in the first year?
 - A. R775 000
 - B. R246 000
 - C. R820 000
 - D. R1 021 000

(2)

23. Share K has the following probability distribution of returns:

Probability	Rate of return (%)
0.15	-19.00%
0.55	12.50%
0.1	17.50%

Identify which of the following expected returns is Share K is closest to:

- A. 6.0%
- B. 8.5%
- C. 7.0%
- D. None of the above

(2)

24. Thando has recently changed her investment strategy to be more conservative following the downgrade of South Africa's outlook from stable to negative. Consider the following uncorrelated securities:

Security	Α	В
Expected return (%)	8	20
Standard deviation (%)	18	24

Thando, being a rational investor, using the Mean-variance trade-off:

- A. Will never concentrate all her investments in one security
- B. May concentrate all her investments in Security B
- C. May concentrate all her investments in Security A
- D. Will hold equal portions of A and B in her portfolio

(2)

25. You are an investment advisor, and you have calculated what you believe to be an optimal, well-diversified risky portfolio. It has an expected return of 20% and a standard deviation of 9%. A client visits you and points out that a fund on the JSE (USB fund) has an expected return of 26% and a standard deviation of 13%.

She also notes that she is a small investor, requiring stable and constant returns. With this in mind, she believes she should invest in the USB fund instead of your risky portfolio. Is she correct?

- A. Yes, because she is risk averse
- B. Yes, because her attitude towards risk is aggressive
- C. Yes, regardless of her risk-aversion
- D. No, she would be better off investing in your fund due to her risk aversion (2)

26. If R2 000 is invested at 10% p.a. compounded annually for 5 years, determine the approximate difference in future values be when interest is calculated annually and semi-annually?

- A. R30
- B. R36
- C. R877

D. R913 (2)

- 27. Identify which ONE of the following investments has the greatest present value?
 - A. An investment that provides R100 000 in 1 year
 - B. An investment that provides R50 000 at the end of each year for 2 years
 - C. An investment that provides R33 333 at the end of each year for 3 years
 - D. An investment that provides R25 000 at the end of each year for 4 years (2)

28. Max is interested in purchasing 10 000 shares of Eyadini Lifestyle Lounge, a shisanyama and entertainment lounge at Umlazi township. He estimates that the future earnings per share for Eyadini will be R8.50 per share. The PE ratio for listed companies in the leisure and entertainment sector on the JSE Ltd is 4.5. Being a private and (unlisted) company, Eyadini carries a higher risk that the companies listed on the JSE. Max therefore estimates that the PE ratio must be adjusted downwards to 2.5 to reflect the risk profile of Eyadini.

Calculate the market price of Eyadini shares?

- A. R3.40
- B. R21.25
- C. R29.41

D. R0.29 (2)

- **29.** Calculate the after-tax cost of debt if the following information applies:
 - 10 000 12% debentures currently trading at 100 each
 - Nominal value of R150
 - Interest is paid annually
 - Redeemable in 7 years
 - The company tax rate is 28%
 - A. 8.75%
 - B. 6.30%
 - C. 7.35%

D. 3.96% (2)

30. Mbedzi Plant &Trucking (Pty) Ltd purchased new plant worth R5 million a few years ago. This year, the company has the opportunity to secure a contract with the local municipality that will generate future cash flows but in order to get the contract they will need to customize their plant and this will cost the company R550 000. Mbedzi Plant &Trucking also has the option to lease the plant out this year and generate rental cash flows of R22 000 per month.

Identify the relevant cash flows that Mbedzi Plant &Trucking would need to take into account upon deciding whether or proceed with the Municipal contract.

- i. Purchase price (R5 million) of the plant
- ii. The monthly rental cash flows (R22 000)
- iii. The cost of customizing the plant (R550 000)

Select the correct answer

- A. (i) only
- B. (i) and (ii) only
- C. (ii) and (iii) only

D. (i), (ii) and (iii) (2)

31. The new warehouse manager of Mega Manufacturers has been advised to determine the order point of inventory levels in an effort to reduce costs.

The following information was provided:

- It takes 15 business (or working) days to deliver an order
- Production takes place form Monday to Friday.
- 500 units are used in production per week.
- 100 units are kept as safety inventory.

Calculate the order point can be calculated as:

- A. 3 000 units
- B. 1 500 units
- C. 7 600 units
- D. 1 600 units (2)

32. Calculate the safety inventory level, using the following information.

Average weekly use	50 units
Order period	5 days
Maximum order period	7 days
Order size	200 units

- A. 100 units
- B. 250 units
- C. 350 units
- D. 400 units (2)

33. New Balancers manufactures running shoes. The following cost information has been provided:

	R
Factory rent	5 000
Direct labour	8 000
Indirect materials	1 000
Direct materials used	3 500
Sales commission	2 500
Factory manager's salary	4 000
Advertising	1 500

Calculate the conversion cost.

- A. R21 500
- B. R18 000
- C. R25 500
- D. R24 000

(2)

34. The following inventory balances for November was presented to you:

	1 November	30 November
Raw material	R58 000	R84 000
Work in progress (inventory)	R372 000	R436 000
Finished goods	R224 000	R196 000

The total manufacturing cost for November was R1 898 000.

Calculate the cost of goods manufactured by New Balancers.

- A. R1 898 000
- B. R1 834 000
- C. R1 926 000
- D. R586 000 (4)

Use the information below for questions 35 - 39

The following employee information has been submitted for Brenda regarding the hours she has worked for the week:

Basic Wages	R12 000
Overtime	R4 000
Pension fund contribution by employee and employer	8%
PAYE	X?
UIF	Y?
Net Remuneration	Z?
Number of weeks per year	52 weeks
Annual leave	3 weeks
Normal working week	5 days for 8 hours per day
Public holidays	7 days
Sick leave	5 days
Idle time	8%

- The income tax rate applicable to Brenda is 20%
- UIF is paid on the basis of 1% by the employee and 1% be the employer
- **35.** Calculate the amounts represented by X and Y assuming Brenda's taxable income is R16 000:
 - A. X is R3 200 and Y is R160
 - B. X is R1 600 and Y is R320
 - C. X is R16 000 and Y is R1 600
 - D. None of the above (2)
- **36.** In the calculation of productive labour hours, idle time that needs to be subtracted is ... hours:
 - A. 166.40
 - B. 156.80
 - C. 149.12
 - D. 135.67 (4)
- 37. Calculate the production labour hours
 - A. 1 834.88 hours
 - B. 1714.88 hours
 - C. 1864 hours
 - D. 1 678.57 hours (2)

- **38.** If employees at Flex Manufacturers are required to work 1 950 budgeted productive hours after incurring 30% idle time per year, and employee cost totaled R73 000 for the year, calculate the labour cost per hour
 - A. R37.44
 - B. R53.48
 - C. R26.71
 - D. R45.90 (2)

End of Section B

SECTION C [40 MARKS]

ANSWER THIS SECTION IN THE ANSWER BOOK PROVIDED

QUESTION 1 (8 Marks)

Uber Eats is an online food delivery company. Users can read menu's, order and pay for food from participating restaurants using an application on the iOs or Android platforms. Meals are delivered by couriers using cars or motorbikes.

Jabu is an Uber Eats employee. He purchased a "Big Boy Commercial 150cc" motorbike for R13 999 to use for his deliveries. He financed the motor bike through a loan from Big Bank at an effective rate of 10% p.a. He must repay the loan in monthly instalments over the next 3 years.

Jabu receives a fixed monthly salary and tips from the customers. Jabu saved all the tips that he received over the 4 months at Big Bank at nominal rate of 9.5% p.a.compounded monthly. The tips were as follow:

Month 1 R3 000 Month 2 R2 800 Month 3 R4 000 Month 4 R3 750

REQUIRED:

- **1.1** Determine the value of his monthly instalment
- **1.2** Determine how much Jabu will still own the bank after 18 months?
- (1)
- **1.3** Determine the value of Jabu's tips at the beginning of month 1?

(2)

(3)

1.4 If the interest that Jabu earns on his savings increased, what impact would that have on the value of his savings at the today?(2)

QUESTION 2 (8 MARKS)

The following is a current abridged statement of financial position relating to Bona Ltd, a company listed on the JSE.

	Rm	Rm	Notes
Equity and liabilities			
Share capital	12		1
Retained earnings	15		
Total equity		27	
Non-current liabilities			
Long-term borrowings	13		2
Current liabilities	21		3
Total liabilities		34	
Total equity and liabilities		61	

Notes:

- 1. The share capital of Bona Ltd consists of 12 million of ordinary shares currently trading at R1.50 per share
- 2. Long-term borrowings consist of a loan. Repayments on the loan are due each year at 15% of the current value, for a period of 10 years
- 3. Current liabilities consist of Trade and other payables as well as bank overdraft, with interest of 20% per annum payable thereon.

Additional information:

- 1. The current long-term government bond yield is 10% and equity risk premium is expected to be 6% going forward.
- 2. The corporate tax rate is 28%

REQUIRED:

2.1 Calculate the after-tax weighted average cost of capital of Bona

(8)

QUESTION 3 (6 Marks)

After experiencing accommodation shortages during their University days, two friends decided to go into the business of providing affordable student accommodation at Auckland Park for University of Johannesburg (UJ's) students and other surrounding universities. They projected the following cash-flows in building and developing their first student accommodation that will lodge 150 students.

Year	Cash flow (million)
0	-R1 590 000
1	R360 500
2	R475 000
3	R450 000
4	R539 000
5	R587 500

Based on their research and the current risk profile of their company, they have determined the following benchmarks in order to ensure that they make decisions in the best interest of the company.

- Profitability Index of the project is 35
- Target Average Accounting Rate of Return (ARR) is 75.76%
- Target Payback Period (PBP) is 2.5 years
- Required rate of return is 12.20%
- Weighted Average Cost of Capital (WACC) is 12%

REQUIRED:

- 3.1 Calculate the accounting rate of return (ARR) and advise whether the project should be accepted or rejected?
 (2)
- **3.2** Calculate the payback period and advise whether the project should be accepted or rejected? (2)
- 3.3 Calculate the net present value (NPV) and advise whether the project should be accepted or rejected?(2)

QUESTION 4 (5 MARKS)

Jabulani Limited's accountant has just retired and as yet, have not hired anyone to replace her. Management are trying to determine the value of the raw material issued to work-in-progress and have contacted you to assist them with the process. They provided you with the following transactions:

Date	Unit cost price	Purchases from	Returns to	No of units transferred
		supplier	supplier	to WIP
3 April	R10	120 units		
10 April				100 units
20 April			20 units	
26 April	R15	150 units		

Additional information:

Opening raw material inventory: 25 units at an average price of R12 per unit.

Any returns to suppliers are made at original cost.

The return on 20 April relates to purchases made on 3 April.

REQUIRED:

4.1 Using the weighted average method of valuation, prepare the stores ledger account for the month of April.(5)

QUESTION 5 (5 Marks)

Madiba Magic Limited manufacture the original "Madiba" shirt. Madiba Magic accounts for its stock on the FIFO basis. You have been provided with the following transactions for the month and have been asked to provide the accountant with the closing stock balance to be included in his month end report.

Opening inventory: 200 shirts at R100 each Actual purchases and sales for the month:

	P	PURCHASES	
DATE	Quantity	Price per shirt	SHIRTS SOLD
2	250	R125	
8			220
15	150	R1352	
20			200
29			50

REQUIRED:

5.1 Determine the closing stock balance to be included in the accountant's month end report.

(2)

5.2 Calculate the value of cost of sales for April.

(3)

QUESTION 6 (8 MARKS)

Sipho is a tutor at UJ, who is employed on a contract basis and is paid per week for the hours that he works.

For the past study week before exams, Sipho worked the following hours:

Day of the week	No. of hours worked	
Monday	8	
Tuesday	8	
Wednesday	9	
Thursday	10	
Friday	10	
Saturday	8	

Sipho's contract states that he will receive R80 for every hour worked, and he is expected to work 8 hours per day. Overtime is paid at 1.5 times his normal rate, and weekends are paid at double the normal daily rate.

The following deductions are made from Sipho's remuneration:

- Pension fund contributions of 8% (UJ also contributes 8%)
- PAYE is calculated as 15% of taxable remuneration.
- Weekly Medical Aid premiums of R150 are payable to MediMed, of which Sipho and UJ contribute 50% each
- UIF payments are made monthly, but are deducted from Sipho's wages each week. 1% is contributed by Sipho and 1% by UJ.

Sipho incurred 9 unproductive hours during this week.

REQUIRED:

6.1 Calculate the net wages for Sipho for the week

(4)

6.2 Calculate the labour recovery per hour to UJ for the week

(4)

End of assessment