

THE NATIONAL ANNUAL FINANCE AND INVESTMENT MANAGEMENT OLYMPIAD

2016 FIMO Paper Round Two

1. You have been provided with a question paper and an answer sheet.
2. The question paper consists of 40 multiple choice questions. Duration of paper is 2 hours.
3. Answer all questions on the special answer sheet provided.
4. Each question shows **FOUR** alternative answers (A,B,C, or D).
5. Choose the correct answer to each question by marking ● on the answer sheet, using a pencil **ONLY**. One answer ● per question **ONLY**. Colour a circle completely (in full). Erase any faulty marks completely. Do not make any stray marks or calculations on the answer sheet provided. Do not fold, tear or damage this form as it will be machine marked.
6. After completing question 40 you may hand in your answer sheet to your educator. Please note that the answers stop at 40.
7. You do not have to fill in a student number on the answer sheet. If you do not have an ID number or do not know your ID number, please fill in your date of birth in the following format: yymmdd
8. Please write your school name in the “Course code” blocks as well as your surname and initials (example AJ Smith if you are Allan John Smith) The date on the sheet refers to the date you wrote the olympiad.

Good luck with the second round paper for the Finance and Investment Management Olympiad. You received a question paper as well as a red answer sheet.

organiser



sponsor



THINK. REINVENT.

1. **The _____ of an asset is the change in value plus any cash distributions expressed as a percentage of the initial price or amount invested.**
 - A. Return
 - B. Value
 - C. Risk
 - D. Probability

2. **_____ is/are financial assets.**
 - A. Only bonds
 - B. Only machines
 - C. Only shares
 - D. Shares and bonds

3. **Money market securities _____.**
 - A. are short term
 - B. are highly marketable
 - C. are generally very low risk
 - D. are short term, highly marketable, and generally very low risk

4. **You purchased a share last year for R50. One year later you received R1.25 as a dividend and sold the share. If you earned a return of 12.5%, how much did you sell the share for?**
 - A. R55.00
 - B. R56.25
 - C. R57.75
 - D. R58.00

5. **Both the dividend and the increase in share price contribute to a share's:**
 - A. dividend yield
 - B. capital appreciation
 - C. expected return
 - D. none of the above

6. **How is the dividend yield for a share calculated?**
 - A. Price/Dividend
 - B. Dividend/Price
 - C. Earnings/Dividend
 - D. Dividend/Earnings

7. **Which one of the following financial statements is referred to as a “statement of financial position” and gives a picture of a company’s financial position at a particular point in time?**
 - A. income statement
 - B. balance sheet
 - C. statement of cash flows
 - D. tax reconciliation statement

8. Which of the financial ratios relate to the solvency of an organization:

- i. Current Ratio*
- ii. Quick Ratio*
- iii. Gross Profit Margin*
- iv. Return on Assets.*

- A. i and ii only
- B. ii and iii only
- C. i and iii only
- D. i, iii and iv only

9. If your current ratio is less than 1, it means that:

- A. current assets are greater than your current liabilities.
- B. current assets are less than your current liabilities.
- C. current assets are equal to your current liabilities.
- D. none of the above.

10. The quick ratio is stricter than your current ratio because:

- A. it excludes inventory.
- B. it excludes debtors.
- C. it excludes trade creditors.
- D. none of the above

11. Dividend per share is affected by:

- i. Earnings*
- ii. Net Income*
- iii. Dividends*
- iv. Number of Shares*

- A. i and iv
- B. ii, iii and iv
- C. iii and iv
- D. i, ii, iii and iv

12. The earnings yield is the inverse of which of the following ratios:

- A. P/E
- B. E/P
- C. D/E
- D. E/D

13. Which of the following forms part of property investments:

- A. Residential apartment building
- B. Office Space
- C. A Farm
- D. All of the above

14. SR Ltd has sales of R200 000 000, cost of sales of R 130 000 000, operating profit of R50 000 000, interest expense of R10 000 000, tax expense of R20 000 000, total equity of R125 000 000 and total debt of R275 000 000. Their percentage mark-up is:
- A. 25.3%
 - B. 35.7%
 - C. 38.5%
 - D. 53.8%
15. SR Ltd has sales of R200 000 000, cost of sales of R 130 000 000, operating profit of R50 000 000, interest expense of R10 000 000, tax expense of R20 000 000, total equity of R275 000 000 and total debt of R100 000 000. Their net profit margin is:
- A. 8.0%
 - B. 10.0%
 - C. 12.0%
 - D. 16.0%
16. SR Ltd has sales of R200 000 000, cost of sales of R 130 000 000, operating profit of R50 000 000, interest expense of R10 000 000, tax expense of R20 000 000, total equity of R275 000 000 and total debt of R100 000 000. Their debt to assets ratio is:
- A. 36%
 - B. 50%
 - C. 275%
 - D. None of the above.
17. SR Ltd has current assets that consist of cash: R50 000 000, and receivables: R70 000 000. If the Current liabilities are R50 000 000 and the quick ratio is 0.8:1, what is the value of the inventory:
- A. R60 000
 - B. R70 000
 - C. R80 000
 - D. R90 000
18. SR Ltd has sales of R200 000 000, cost of sales of R 130 000 000, operating profit of R50 000 000, interest expense of R10 000 000, tax expense of R20 000 000, total equity of R275 000 000 and total debt of R100 000 000. Their return on equity is:
- A. 8%
 - B. 7%
 - C. 10%
 - D. 16%
19. Return on Equity is calculated as:
- A. Sales/Shareholder Equity
 - B. Operating Profit/Shareholder Equity
 - C. Net Income/Shareholder Equity
 - D. Total Assets/Shareholder Equity

20. In which case will an investor receive the least interest?
- A. 10%, compounded annually
 - B. 10%, compounded monthly
 - C. 10%, compounded continuously
 - D. 10%, compounded daily
21. Which of the following is NOT an assumption underlying TVM calculations?
- A. Money is always invested and always productive so that returns can be reinvested at a rate equal to i
 - B. Time periods are all of equal length
 - C. Payments are all inflows
 - D. The interest rate is constant throughout the term
22. Which of the following is TRUE regarding the assumption around Annuities:
- i. *Certain annuity: one with a fixed number of payments and the assurance that the payments will be made*
 - ii. *Discrete annuity: one with equal intervals on the same date*
 - iii. *Simple annuity: one with payments and interest conversions on the same date*
 - iv. *Ordinary annuity - one in which all the payments are made at the beginning of the period*
- A. i and iii
 - B. ii and iv
 - C. iv
 - D. all of the above are true
23. The future value of a given sum of money:
- A. will depend on the *rate of interest*, the *time to maturity* of the deposit
 - B. will be greater than the current value by the amount of the interest earned
 - C. is the value at some time in the future of a sum of money received or paid today
 - D. all of the above
24. If you invested R668 today over a period of 5 years, how much will it be worth if you could earn a rate of 14.5% compounded annually?
- A. R948
 - B. R1355
 - C. R4460
 - D. R1 315
25. You need R1 000 000 in 10 years' time. You are willing to place an amount of R50 000 into an investment at the end of each year. How much interest should you earn in order to reach your objective?
- A. 15%
 - B. 50%
 - C. 10%
 - D. 18%

26. If interest on the outstanding balance of a credit card account is charged at 1.75% per month, what is the effective annual rate of interest?
- A. 1.76%.
 - B. 21.17%
 - C. 21.00%
 - D. 24.23%
27. You borrow R 60 000.00 and repay in 8 equal annual installments of R 12 935.00 with the first payment made exactly 1 year later. To the nearest percent what rate of interest are you paying on the loan?
- A. 10%
 - B. 11%
 - C. 15%
 - D. 14%
28. You make equal R 400.00 monthly repayments on a loan. The annual interest is 15%, compounded monthly. The loan is for 12 years. What is the amount of the original loan?
- A. R26 651.00
 - B. R25 156.21
 - C. R22 657.00
 - D. R24 448.40
29. Suppose an annuity costs R 40 000.00 and produces cash flow of R 10 000.00 over each of the following eight years. What is the rate of return on the annuity?
- A. 10%
 - B. 15%
 - C. 25%
 - D. Need more information
30. The present value interest factor of an annual ordinary annuity for 3 years at 8% equals?
- A. $1/(1.08)^3$
 - B. $1/(1.24)$
 - C. $[1+1/(1.08)+1/(1.08)^2]$
 - D. $[1/(1.08)+1/(1.08)^2+1/(1.08)^3]$
31. You are faced with two investments. Investment A promises a return of 5% per annum compounded annually, whilst Investment B promises a return of 4.75% per annum compounded monthly. Which one would you prefer?
- A. Investment A
 - B. There is not enough information to make the decision.
 - C. Either one
 - D. Investment B

32. Sam borrowed R15 000 at a 14% annual rate of interest to be repaid over 3 years. The loan is amortised into three equal, annual end-of-year payments. The annual end of year loan payment is equal to:
- A. R6 461
 - B. R2 100
 - C. R700
 - D. R5 700
33. You are quoted an interest rate of 12% compounded monthly. What is the effective rate of interest?
- A. 12.68%
 - B. 11.39%
 - C. 12%
 - D. None of the above
34. The lowest rate that can be earned with certainty is considered to be the:
- A. risk-free rate
 - B. risk premium
 - C. required rate of return
 - D. return on any risky investment
35. Other things being equal, a low _____ would be most consistent with a relatively high growth rate of firm earnings and dividends.
- A. dividend payout ratio
 - B. degree of financial leverage
 - C. variability of earnings
 - D. inflation rate
36. If the economy is shrinking, firms with high operating leverage will experience _____.
- A. similar decreases in profits as firms with low operating leverage
 - B. smaller decreases in profits than firms with low operating leverage
 - C. higher decreases in profits than firms with low operating leverage
 - D. no change in profits
37. What does a P/E ratio of 18 suggest?
- A. It suggests investors are willing to pay R0.18 for every R1 of earnings
 - B. It suggests investors are willing to pay R18 for every R1 of earnings
 - C. It suggests investors are willing to pay R1 for every R0.18 of earnings
 - D. It suggests investors are willing to pay R1 for every R18 of earnings
38. If all other factors remain unchanged, the P/E ratio will increase, if the
- A. Dividend payout rate increases
 - B. ROE decreases
 - C. Retention ratio decreases
 - D. The country's liquidity risk increase

- 39. GDP refers to _____.**
- A. the amount of personal disposable income in the economy
 - B. the difference between government spending and government revenues
 - C. the total manufacturing output in the economy
 - D. the total production of goods and services in the economy
- 40. An example of unsystematic risk is:**
- A. prolonged labour strike
 - B. changes to the interest rate
 - C. a rise in inflation
 - D. A change in the tax rate