

### 2023

# FINANCE AND INVESTMENT MANAGEMENT OLYMPIAD UJ FIMO PAPER ROUND TWO

DURATION: 1 HOUR QUESTIONS: 30 MULTIPLE GRADE 10 11 12

DATE: 2023-08-02

- 1. Complete questions on the ANSWER SHEET provided.
- 2. Complete all information on the ANSWER SHEET.
- 3. There are 4 possible answers per question (A B C D)
- 4. Only one answer is correct.
- 5. Colour a circle completely.
- 6. Good luck!

## 1. Cryptocurrency transactions are verified by network nodes through cryptography and recorded in a public distributed ledger called a?

- a. Proof-of-Work
- b. Node
- c. Cryptanalysis
- d. Blockchain

#### 2. Which hash function used in Ledger?

- a. SHA-64
- b. SHA-128
- c. SHA-256
- d. SHA-512

#### 3. In the future, Blockchain applications will include:

- a. Only transactions within the border of one country.
- b. Only transactions involving cryptocurrencies.
- c. Only transactions between companies or government agencies.
- d. Cryptocurrency transactions, transactions between governments, companies and consumers, voting, healthcare and many other applications.

#### 4. What does the acronym P2P refer to:

- a. Peer-to-Peer
- b. Payment-to-Payment
- c. Password-to-Password
- d. Product-to-Product

### 5. Bitcoin is the largest cryptocurrency by market capitalisation. What is the maximum number of Bitcoins that will ever be created?

- a. 21 million
- b. Bitcoin is not real so no tokens really exist
- c. Nobody knows as it is created randomly
- d. Infinity, the machines will keep on producing Bitcoin forever

#### 6. What is the market capitalisation of the total cryptocurrency market as of April 2023?

- a. \$1.2 million
- b. \$1.2 billion
- c. \$1.2 trillion
- d. \$1.2 quadrillion

#### 7. Where can you buy cryptocurrency?

- a. An Exchange
- b. Bitcoin ATM
- c. P2P transaction
- d. All of the above

#### 8. Which of the following are challenges for cryptocurrencies?

- I. Government intervention
- II. Lack of liquidity
- III. Red tape
- IV. Tax revenue collection mechanism
  - a. I and II
  - b. I and III
  - c. I, II and III
  - d. I, II, III and IV

#### 9. The expected return on a common stock is composed of:

- a. Capital appreciation
- b. Dividend yield
- c. Both dividend yield and capital appreciation
- d. Retention ratio

#### 10. What are the five areas that financial ratios concentrate on?

- a. Market related, share prices, dividend policy, debt policy, strategy
- b. Profitability, strategy, liquidity, auditing, share prices
- c. Liquidity, profitability, debt, efficiency, market related
- d. Liquidity, current ratio, quick ratio, interest cover, dividend cover

#### 11. According to IAS 33, earnings per share is affected by:

- a. Net income
- b. Number of shares
- c. Weighted average number of shares
- d. a and c, but not b

### 12. You purchased a share last year for R85.25. One year later you received R6.75 as a dividend and sold the share. If you earned a return of 22.5%, how much did you sell the share for?

- a. R97.70
- b. R104.45
- c. R106.55
- d. R111.20

#### 13. How is the dividend yield for a share calculated?

- a. Dividend/Earnings
- b. Earnings/Dividend
- c. Dividend/Price
- d. Price/Dividend

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

- a. E/P
- b. P/E
- c. E/D
- d. D/E

#### 15. Which of the following statements is most likely correct?

- Value stocks are usually traded in small quantities, whilst growth stocks are traded in large quantities
- b. Value stocks are more expensive than growth stocks
- c. Growth stocks reinvest a significant portion of their earnings in an effort to boost future profits, whereas value stocks distribute a significant portion of their earnings in the form of dividends
- d. Value stocks reinvest a significant portion of their earnings in an effort to boost future profits whereas growth stocks distribute a significant portion of their earnings in the form of dividends

### 16. Which of the following are considered by SARS when determining whether profits are revenue or capital in nature?

I Intention of the original purchase

II Length of time that the asset was held

III The total value of the transactions

IV The frequency of the transactions

- a. I, II and IV
- b. I and IV
- c. I, II and III
- d. All of the above

17.	Based on the following data for a firm: current assets of R 500 000; current liabilities of R 300 000; long-term debt of R 600 000; and goodwill of R 50 000. Determine the firm's current	
	ratio.	
	a.	0.55x
	b.	0.60x
	c.	1.67x
	d.	1.80x
18. A firm has assets of R 15 000 000, total borrowings of R 2 500 000, and equity of R 12 500 000 Calculate the company's gearing ratio.		n has assets of R 15 000 000, total borrowings of R 2 500 000, and equity of R 12 500 000.
		1:6
	_	5:1
	d.	6:1
10	If the	capital gearing ratio is high for a company, it indicates that it has:
19.	a.	
	_	Low debt equity ratio.
	о. С.	
	_	Low debts
	u.	Low debts
		mine the number of days credit granted by a firm which has: current debtors of R100 000; nonthly sales of R60 000 (this month) and R 80 000 (previous month). Assume 30 days in a
		h.
	a.	44 days
	b.	45 days
	c.	46 days
	d.	50 days
21.	A firn	n has a stock turnover ratio of 7x, a P/E ratio of 25x, EPS of R 2 and cost of goods sold of R
	600 0	00. Determine the firm's average stock value.
	a.	R16 666
	b.	R85 714
	c.	R120 000
22.	c. d.	R120 000 R350 000
22.	c. d.	R120 000 R350 000 does a P/E ratio of 18 suggest?
22.	c. d.	R120 000 R350 000  does a P/E ratio of 18 suggest? It suggests investors are willing to pay R0.18 for every R1 of earnings
22.	c. d. What	R120 000 R350 000 does a P/E ratio of 18 suggest?

#### 23. Actual data confirms that:

- a. PE ratios are more appropriate in low growth rate situations
- b. Either PE or PEG ratios are appropriate in low growth rate situations
- c. PEG ratios are appropriate in higher supernormal growth situations
- d. Both A and C are correct

#### 24. 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 II
  - b. I and III
  - c. II and IV
  - d. All of the above are true
- 25. The present value interest factor of an annual ordinary annuity for 3 years at 8% equals?
  - a.  $1/(1.083)^3$
  - b. 1/(1.24)
  - c.  $[1+1/(1.08)+1/(1.08)^2]$
  - d.  $[1/(1.08)+1/(1.08)^2+1/(1.08)^3]$
- 26. If interest on the outstanding balance of a credit card account is charged at 13.75% compounded daily, what is the effective annual rate of interest?
  - a. 13.96%
  - b. 14.20%
  - c. 14.45%
  - d. 14.66%
- 27. At a rate of 8%, what is the present value of the following cash flow stream? R0 at Time 0; R100 at the end of Year 1; R300 at the end of Year 2; R0 at the end of Year 3; and R500 at the end of Year 4?
  - a. R717.31
  - b. R771.31
  - c. R817.31
  - d. R900.00 compounded yearly for 4 years

#### 28. Mathis Ltd has the following information for the year ending 28 February:

Profit for the year R3 200 000

Ordinary dividends paid R720 000

Number of ordinary shares 14 700 000

Market Price at 28 February R1.21

What is the dividend yield for Mathis Ltd as at 28 February?

- a. 4.05%
- b. 4.90%
- c. 17.99%
- d. 22.04%

#### 29. Who is the current minister of finance?

- a. Pravin Gordhan
- b. Enoch Godongwana
- c. Malusi Gigaba
- d. Nhlanhla Nene

#### 30. Who is the current governor of the South African Reserve Bank (SARB)?

- a. Gill Marcus
- b. Tito Mboweni
- c. Malusi Gigaba
- d. Lesetja Kganyago