

**Certificate in**  
**Investment Research Analyst**  
**(CIRA)**  
**(Mock Test)**

- 1) A seasoned investor is beginning his relationship with an investment firm. To his investment manager he boasts how he has earned abnormal profits year over year by making investments towards the end of the year and encashing them in January, how he has always steered clear of IPOs and he usually picks up new stocks on Mondays rather than other days. Can earning abnormal returns through such antics be possible? Why or why not?
  - A. May be possible, due to more popular calendar anomalies
  - B. Certainly possible, due to more popular technical anomalies
  - C. Not possible, there are no studies supporting market anomalies
  - D. Not possible, market anomalies are a myth
  
- 2) An investor was advised to buy a share of Ada but he bought Aada as he did not remember the name correctly, thereby ending up investing in an overvalued security Aada. He also did not buy an undervalued security Zeta because the issuing company had operations in a country that was probably using child labour for the manufacture. Identify which behavioural biases are at play in each case.
  - A. Emotional bias in buying Aada and Cognitive error in not buying Zeta
  - B. Emotional error in buying Aada and not buying Zeta
  - C. Cognitive error in buying Aada and not buying Zeta
  - D. Cognitive errors in buying Aada and Emotional biases in not buying Zeta

3) Identify the behavioural biases in the below scenarios:

Case 1: The domestic stock markets have been on a bull run for the past 26 months, however, it appears that the Foreign Institutional Investors (FIIs) steadily started withdrawing from the domestic markets a few months back, however, this doesn't seem to have impacted the market sentiment negatively yet.

Case 2: The analysts have been reviewing data from the FII investments and while the evidence clearly states that there have been steady withdrawals in the past few months, it does appear that the steady inflow of domestic investments coupled with a positive sentiment about the new government will be able to support the bull run for another 12-15 months. Therefore even prolonged FII outflow would not adversely affect the domestic markets.

- A. Case 1: Emotional Bias  
Case 2: Conservatism bias
- B. Case 1: Conservatism Bias  
Case 2: Confirmation Bias
- C. Case 1: Confirmation Bias  
Case 2: Emotional Bias
- D. Case 1: Confirmation Bias  
Case 2: Representativeness Bias

4) Martin is holding following bonds

- A) 10% yield and 5 years maturity
- B) 12% yield and 5 years maturity
- C) 10% yield and 10 years maturity
- D) 12% yield and 10 years maturity

Which of the above bonds will have least interest rate risk?

A. B

B. A

C. C

D. D

5) Joseph is holding following bonds

- A) 6 month T bill
- B) 20 year prepayable amortizing bond
- C) 5 year zero coupon bond
- D) 5 year 5% debenture

Which of the above bonds will have least reinvestment risk?

A. D

B. A

C. C

D.B

6) Martin and Steve were discussing the application of FCFF (Free cash flow to the firm) and FCFE (Free cash flow to equity) models. Martin asks Steve which free cash flow based model he will preferably choose in the following two cases?

- Case 1: A company with relatively stable capital structure
- Case 2: Leveraged company with changing capital structure

A. Case 1: FCFE  
Case 2: FCFF

B. Case 1: FCFF  
Case 2: FCFE

C. Case 1: FCFE

Case 2: FCFE

D. Case 1: FCFE  
Case 2: FCFE

7) Martin is analyzing two companies, Cord Motors and Kuzuki Motors. Cord Motors is a levered company with negative free cash flow to equity (FCFE). Kuzuki motors is a levered company with a changing capital structure. Out of free cash flow to equity (FCFE) and free cash flow to firm (FCFF), which free cash flow based model Martin should preferably select for valuation of these two companies?

- A. Cord Motors: FCFE  
Kuzuki Motors:FCFE
- B. Cord Motors: FCFE  
Kuzuki Motors:FCFF
- C. Cord Motors: FCFE  
Kuzuki Motors:FCFF
- D. Cord Motors: FCFE  
Kuzuki Motors:FCFE

8) Craig and James were analyzing Allchem Inc. Craig asks which model he should preferably be using in the following two cases?

Case 1 : Valuing Allchem Inc. from control perspective

Case 2 : Valuing Allchem Inc. from non control perspective.

- A. Case 1: Dividend discount based model  
Case 2: Free cash flow based model
- B. Case 1: Free cash flow based model  
Case 2: Dividend discount based model

C. Case 1: Free cash flow based model  
Case 2: Free cash flow based model

D. Case 1: Dividend discount based model  
Case 2: Dividend discount based model

9) CTC Company has FCFE (free cash flow to equity) of USD 1.5 billion. CTC required rate of return of equity is 12% and WACC (weighted average cost of capital) is 10%. FCFE is expected to grow indefinitely at 6% and FCFE is expected to grow indefinitely at 6.5%. CTC has debt outstanding of 10 billion. What is the total value of CTC equity using the FCFE valuation model?

A. USD 25.33 billion

B. USD 53 billion

C. USD 43 billion

D. USD 33.33 billion

10) If all the securities analyzed have estimated values higher than their market prices, the securities all appear to be:

A. Unvalued

B. Overvalued

C. Fairly valued

D. Undervalued

11) Which equity valuation model focuses on expected dividends rather than the capacity to pay dividends?

- A. Dividend Discount Model
- B. Present value model
- C. Free Cash Flow to Equity Mode
- D. Cash Flow Return on Investment Model

12) An analyst is evaluating a share which is expected to pay dividends of GBP 5.00 and GBP 5.25 at the end of the next two years. At the end of the second year, the analyst expects the shares to trade at GBP 35.00. The required rate of return on the shares is 12%. If the Analyst's forecasts are accurate and the market price of the shares is currently GBP31, the most likely conclusion is that the shares are:

- A. Fairly Valued
- B. Overvalued
- C. Undervalued
- D. Inconclusive, with the given information

13) Calculate the value of a share with a par value of USD 20.00, maturity in six years, a nominal required rate of return of 8.20 %, and semiannual dividends of USD 2.00, when dividends are paid annually.

- A. USD 29.01
- B. USD 31.01

C. USD 32.84

D. USD 30.84

14) Estimate the value of a non-convertible preferred stock with a par value of EUR 20.00, maturity in six years, a nominal required rate of return of 8.20 %, and semiannual dividends of EUR 2.00, when dividends are paid semi-annually.

A. €30.84

B. €31.01

C. €36.84

D. €27.01

15) A company has paid USD 5 dividend this year on its equity share and it's expected to grow at 10% per year for the next 3 years and then 5% thereafter. The required rate of return is 15 percent. Estimate the intrinsic value of the company's share.

A. USD 59.02

B. USD 60.02

C. USD 59.68

D. USD 60.68

16) Which of the following is an advantage of using Price Multiples for evaluating stocks?

A. They allow for relative comparisons, both cross-sectional and in time series.



- B. The differences in reporting rules in companies ensure that multiples are easily comparable.
- C. They allow for a justifiable comparison in cyclical companies
- D. While price multiples are complex in calculation, the source data is available easily.

17) Calculate EV/EBITDA using the following information: The Book Value (BV) of long-term debt is USD 1,223,157 and market value of long-term debt: USD 2,487,839. market value of stock: USD 7,349,229 . End of year cash and equivalents: USD 269,176, EBITDA: USD 1,078,606.

- A. 7.6
- B. 9.8
- C. 8.9
- D. 6.7

18) While using asset-based valuation models, what would an Analyst base the intrinsic value of a common share of stock?

- A. estimated market value of the company's assets minus liabilities
- B. estimated market value of the company's assets
- C. estimated market value of the company's assets plus liabilities
- D. estimated market value of the company's debt

19) How would an analyst compute the intrinsic value of a share of stock when using the free cash flow to equity model?

- A. the present value of future expected FCFE minus fixed capital investment
- B. the present value of the FCFE plus the outstanding debt
- C. the present value of future expected FCFE plus net borrowing
- D. the present value of future expected FCFE

20) Reliable Inc. has reported net income of USD 50,000 for the fiscal year ending December 31, 2013. As on December 31, 2013 its accounts receivable balance is USD 100,000, Accounts payable balance is USD 40,000. As on December 31, 2012 its accounts receivable balance is USD 1,60,000, Accounts payable balance is USD 50,000. As per income statement for the fiscal year ending December 31, 2013 Depreciation is USD 20,000 and there is an unrealised loss of USD 5000. What will be cash flow from operations for Reliable Inc. for the financial year ending on December 31, 2013?

- A. USD 115,000
- B. USD 125,000
- C. USD 25,000
- D. USD 5000

21) Mainland Inc. had following transactions during 2010 A)Purchased new assets for USD 100,000 B)Mortgage principal repayment of USD 20,000 C)Converted USD 50,000 worth of preferred shares to common shares. What will be Mainland Inc.'s cash flow from investing?

- A. - USD 100,000

B. - USD 120,000

C. -USD 170,000

D. -USD 150,000

22) Suntek Cements has a current ratio of 2.0. It is going to pay some of the accounts payable from the cash account. What will be the impact on the current ratio?

A. Higher current ratio due to more decrease in denominator and increase in numerator.

B. Lower current ratio due to more decrease in numerator than denominator

C. Higher current ratio due to more decrease in denominator than numerator

D. Ratio remains unchanged

23) Sun Lubricants has current ratio less than one, which means

A. Company probably facing liquidity crisis and may have negative working capital.

B. Company probably facing a liquidity crisis and has negative working capital.

C. Company facing liquidity crisis and has negative working capital.

D. Company probably facing a liquidity crisis but has positive working capital.

24) Mark Auto's receivable turnover is 12 times, Inventory turnover is 7 times, and payable turnover is 10 times. Mark Auto's cash conversion cycle is

A. 46 days

B. 15 days

C. 29 days

D. 83 days

25) Leverage ratios help in getting an idea of the firm's methods of financing assets.

A. DSCR ratio gives idea of firm's method of financing assets

B. FALSE

C. Leverage ratio gives an idea of firm's liabilities

D. TRUE

26) How do "Equity Shares" and "Residential House" compare in terms of Current yield, Liquidity and Tax Shelter?

A. Both have high tax shelter

B. Residential house has high liquidity

C. Residential house has high current yield

D. Equity Shares have moderate risk

27) In a futures contract of 1000 shares of Solar Automobile to be delivered at USD 200 per share in 90 days time. Mr. Smith has a long position and Mr. Johnson has a short position. On the 90th day if the price of Solar Automobile shares happens to be USD 205, which of the following statements is correct?

- A. Mr. Smith gains USD 2,05,000
- B. Mr. Johnson gains USD 5000
- C. Mr. Smith gains USD 5000
- D. Mr. Johnson gains USD 2,00,000

28) If "S" denotes price of underlying stock and "X" denotes exercise price of the option. Which of the following is True? When

- A.  $S > X$ , Call option is in the money
- B.  $S > X$ , Put option is in the money
- C.  $S > X$ , Call option is out of money
- D.  $S < X$ , Put option is out of money

29) Ben and Johnny were discussing the American option and European option. Ben said "American options allow for exercise on or before the option expiration date". Johnny said "Prior to expiration, the European option may have higher value than the equivalent American option". Are statements made by Ben and Jonny correct?

- A. Both Ben and Johnny are correct
- B. Only Johnny is correct
- C. Both Ben and Johnny are incorrect
- D. Only Ben is correct

30) Stuart wants to check how the returns of Cord Motors and Kuzuki Motors move together. He should be checking

- A. covariance
- B. range
- C. standard deviation
- D. semi variance

31) Portfolio 1 has expected return of 8% and expected standard deviation of 16%. Portfolio 2 has expected return of 10% and expected standard deviation of 28%. Portfolio 3 has expected return of 13% and expected standard deviation of 24%. Portfolio 4 has expected return of 16% and expected standard deviation of 32%. Which portfolio falls below Markowitz efficient frontier?

- A. Portfolio 1
- B. Portfolio 2
- C. Portfolio 3
- D. Portfolio 4

32) Joe currently owns Coffee Co. and has the option of adding either Alpha Co. or Beta Co. These stocks have covariance of returns of -0.7 and 0.7 with Coffee Co. respectively. Which of the below choices best describes portfolio risk?

- A. Decline more if only Alpha Co. added
- B. Decline more if only Beta Co. added
- C. Increase if only Beta Co. added
- D. Remain unchanged if both stocks are purchased

33) Taylor and Compton were discussing "Risk Aversion". Taylor made the following three comments.

Comment 1: Risk aversion refers to the fact that individuals prefer less risk to more risk

Comment 2: Risk averse investor will never accept riskier investment. Taylor is correct with respect to:

- A. Neither Comment 1 nor Comment 2
- B. Comment 2 only
- C. Both Comment 1 and Comment 2
- D. Comment 1 only

34) How can investors predict stock prices under the Random walk hypothesis?

- A. Stock prices can be predicted only if all relevant information is available
- B. Stock prices can be predicted only in the short run as per the Random walk hypothesis
- C. Stock prices can not be predicted as per the Random walk hypothesis
- D. Stock prices can be predicted with the help of technical analysis

35) Investors are not able profit from exploiting market anomalies due to:

- A. Transaction Costs

B. Market anomalies are usually unexploitable

C. Market anomalies are only theoretical

D. Low transaction costs

36) If markets are semi-strong efficient, standard fundamental analysis will give an Investor abnormal trading profits that are:

A. Zero

B. Negative

C. Positive, but small

D. Positive

37) For making rational and irrational investment decisions, the efficient market hypothesis would require:

A. only that all investors make rational decisions

B. that both the market and the investors are rational

C. only that the market is rational

D. that some investors make irrational decisions

38) Which of the following is most likely to explain the January effect anomaly?

A. portfolio window dressing

B. large market capitalization stocks



- C. small, mid and large market capitalization stocks
- D. its attributed to new and relevant information

39) Which of the following statement(s) is(are) correct?

Statement 1:-For a country experiencing inflation real return is greater than nominal return

Statement 2: For a country experiencing deflation nominal return is greater than real return

- A. Statement 1 only
- B. Both Statement 1 and Statement 2
- C. Neither Statement 1 nor Statement 2
- D. Statement 2 only

40) For Banana Inc. stock returns for three years period are 22%, -10%, 14%. The Variance and Standard Deviations of returns are

- A. Variance = 28  
Standard Deviation = 5.29
- B. Variance = 28  
Standard Deviation = 5.29
- C. Variance = 18.66  
Standard Deviation = 4.32
- D. Variance = 4.32  
Standard Deviation = 18.66

41) The cost of an investment in Product A was USD 50,000, after a year, it was sold for USD 52,000. Another investment B with similar investment and holding period has an ROI of 3.5%. Which investment will the investor prefer if he considers higher Return on Equity (ROE) as the only deciding factor?

- A. The investor will be indifferent because ROI is same for both A and B
- B. Investment A with an ROI of 6%
- C. Investment B because its ROI is higher than that of Investment A
- D. Investment A with an ROI of 4%

42) An investor purchased 1000 shares of a company. Each share costs USD 100. The investor paid USD 100 commission to the broker. The shares were sold at USD 110 per share. The investor also paid USD 150 commission fee to the broker for the transaction. The investor receives dividends that amounted to USD5 per share during the holding period. Calculate the absolute return.

- A. 14.89%
- B. 15%
- C. 14.84%
- D. 15.95%

43) Which of the following is most appropriate regarding Interest Rate Risk?

- A. Bond prices and interest rates have an inverse relationship
- B. Bond prices and interest rates have a positive relationship

- C. Bond prices remain unaffected with changes in Interest rates
- D. Share prices and interest rates have an inverse relationship

44) If CI (Confidence index = quality bond yields/average bond yields) increases. According to technical analysis investors are doing which of the following?

- A. Buying high quality bonds and selling low quality bonds because confidence is increasing.
- B. Selling high quality bonds and buying low quality bonds because confidence is increasing.
- C. Selling high quality bonds and buying low quality bonds because confidence is decreasing.
- D. Buying high quality bonds and selling low quality bonds because confidence is decreasing.

45) Billy and Jean were discussing indicators of market direction in technical analysis. Billy said "When over 80% of the stocks are selling above their 200 day moving average, it is a bullish indicator". Jean said "When the uptick downtick ratio is more than 1.2 the market is bullish". Are the statements made by Bill and Jean correct?

- A. Both Billy and Jean are incorrect
- B. Both Billy and Jean are correct

- C. Only Jean is correct
- D. Only Billy is correct

46) Which one of following is a bullish signal to a smart money technical analyst in US

- A. The T-bill Euro dollar spread widens
- B. Debit balance in brokerage account falls
- C. Specialist short sales ratio falls below 30%
- D. Barron's confidence index decreases

47) What will be the effective annual rate if the nominal (stated) rate is 10%, compounded quarterly?

- A. 10.38%
- B. 10.00%
- C. 10.25%
- D. 10.47%

48) What is the present value of four USD1000 end of year payments if the first payment is to be received three years from today and the applicable rate of return is 10%?

- A. USD4,868

B. USD2,382

C. USD3,170

D. USD2,620

49) Mr. Smith deposits USD500 today and at the beginning of each of next four years, how much he will get seven years from today at 7% interest

A. USD2,909

B. USD3,522

C. USD3,292

D. USD2,719

50) Mr. Rayan will receive an annuity of USD50,000, once every two years. The payment will stretch out over 30 years. The first payment will be received by the end of two years. If the annual interest rate is 10% what is the present value of annuity?

A. USD224,450

B. USD235,673

C. USD380,304

D. USD471,346

## Answers

1. A	2. D	3. B	4. B	5. C
6. A	7. B	8. B	9. C	10. D
11. A	12. C	13. D	14. B	15. C
16. A	17. C	18. A	19. D	20. B
21. A	22. C	23. B	24. A	25. D
26. A	27. B	28. A	29. D	30. A
31. B	32. A	33. D	34. C	35. A
36. A	37. C	38. A	39. C	40. A
41. D	42. C	43. A	44. B	45. A
46. C	47. A	48. D	49. B	50. A