

2023 EXAMINATIONS



PART II FINAL YEAR

ACCOUNTING AND FINANCE

AC.F 304 FINANCIAL MARKETS

DURATION: **2 hours + 15 minutes reading time**

This examination paper consists of **four** sections.

All Sections (A, B, C and D) are compulsory.

Ensure that the start and end of each question is clearly identifiable.

The use of standard calculators with scientific, and standard arithmetic and statistical functions, is permitted.

SECTION A (30 marks)

- Section A consists of 30 MCQ (Multiple Choice Questions) worth 1 mark each.
- Answer all questions. Choose only one answer for each question.
- Two or more answers provided, illegible answers, are considered as incorrect answers.
- There are no marks deducted for an incorrect answer.

1) The presence of _____ in financial markets leads to adverse selection and moral hazard problems that interfere with the efficient functioning of financial markets

- A) Non-collateralized risk
- B) Free-riding
- C) Asymmetric information
- D) Costly state verification

2) If today is Monday 1st February, and I enter into a 2-month forward Foreign Exchange transaction. The value date will be

- A) April 3rd
- B) April 1st
- C) April 2nd
- D) March 31st

3) Trading bonds via an ECN (Electronic Communications Network) is most suitable for

- A) Corporate Bonds
- B) Government Bonds
- C) Bonds approaching maturity
- D) Derivatives

4) Investment Banks are quoting the following GBP/USD rates.

Bank A GBP/USD 1.1990 BID - 1.2010 OFFER

Bank B GBP/USD 1.2012 BID - 1.2022 OFFER

Bank C GBP/USD 1.1995 BID - 1.2015 OFFER

You, the Client, wish to BUY GBP and SELL USD.

What is the best price available to you?

- A) 1.1990
- B) 1.2010
- C) 1.2022
- D) 1.1995

5) What term is NOT associated with Mortgage-Backed Securities

- A) CMO
- B) MBS
- C) SPV
- D) CDS

6) A Federal Reserve open market purchase of bonds leads to

- A) An increase in the banking system's balance sheet and an increase in the Federal Reserve's balance sheet
- B) No change in the banking system's balance sheet and no change in the Federal Reserve's balance sheet
- C) An increase in the banking system's balance sheet and no change in the Federal Reserve's balance sheet
- D) No change in the banking system's balance sheet and an increase in the Federal Reserve's balance sheet

7) The following statements regarding the 'Yen Carry Trade' are true EXCEPT

- A) The 'Yen carry trade' existed when investors borrowed Yen at a low-interest rate then purchased either U.S. dollars or a currency in a country that pays a high interest rate on its bonds
- B) The 'Yen carry trade' is still a viable investment option versus the US Dollar today
- C) Most Japanese high street banks offered the facility for private investors to access foreign currency deposit accounts
- D) The 'Yen carry trade' ultimately resulted in losses in the wake of 2008 financial crisis as the Yen strengthened in value versus the US Dollar

8) In 2022, what was the main reason the US NASDAQ index fell more than the US S&P 500 index?

- A) NASDAQ index shares are mainly held by non-US investors who were worried the dollar might fall as inflation increased
- B) In a rising bond yield environment, the NASDAQ INDEX comprises of many high-growth technology stocks which pay only small dividends
- C) In a rising bond price environment, the NASDAQ INDEX comprises of many high-growth technology stocks which pay only small dividends
- D) In a rising bond yield environment, the NASDAQ INDEX comprises of many high-growth technology stocks which pay high dividends

9) Who are the big winners from MiFID 2?

- A) Sell Side firms
- B) Technology providers and compliance firms
- C) Buy Side firms
- D) Regulators

10) All the statements about LIBOR and the FED FUNDS RATE are true EXCEPT

- A) When banks borrow via Fed Funds they can only borrow and lend via their Reserve Account at the Federal Reserve
- B) The Fed Funds Rate has one rate whilst there are 35 different LIBOR rates
- C) The Fed Funds Rate is the equilibrium rate based on transactions between bank buyers and sellers
- D) LIBOR is the equilibrium rate based on transactions between bank buyers and sellers

11) For a company's securities, all of the same maturity, what would be the logical interest rate payable to investors on the company's Subordinated debt if the company's Senior Unsecured debt paid an interest rate of 4% and the company's Preferred Stock paid a 6% interest rate?

- A) 3%
- B) 5%
- C) 7%
- D) 8%

12) The Fed Funds Rate will never go above the Fed 'target rate' because

- A) Additional funding is available to banks at the Discount Window Primary Credit Rate set at the upper end of the Fed's target rate for Fed Funds
- B) Additional funding is available to banks at the Discount Window Secondary Credit Rate set at the upper end of the Fed's target rate for Fed Funds
- C) Additional funding is available to banks at the Discount Window Seasonal Rate set at the upper end of the Fed's target rate for Fed Funds
- D) The Fed Funds Rate does often go above the Fed 'target rate'

13) As an Investment Bank Foreign Exchange trader, you are 'long' GBP 100,000 and wish to sell this position.

Three banks are making the same price in GBP/USD 1.3410 – 1.3420. What is a logical price for you to make to clear your trading position?

- A) GBP/USD 1.3410 – 1.3420
- B) GBP/USD 1.3415 – 1.3425
- C) GBP/USD 1.3415 – 1.3420
- D) GBP/USD 1.3405 – 1.3415

14) All the following are TRUE of the MiFID 2 regulation EXCEPT

- A) It may make banks more reluctant to trade securities
- B) It has led to an increase in Investment Bank research hiring
- C) It has led to increased research revenue for Investment Banks
- D) It ensures Buy Side 'Best Execution'

15) A UK firm knows it is going to receive \$400,000 in September. The current spot and future exchange rates are

Exchange Rates GBP/USD	
Period	Rate
Spot	1.3550
March	1.3680
June	1.3790
September	1.3830
December	1.3980

The UK firm decides to fully hedge the position. When September arrives, the actual exchange rate is GBP/USD rate is 1.3740. How much did the UK firm gain or lose by this strategy?

- A) \$1,894.50 gain
- B) £1,894.50 gain
- C) \$1,894.50 loss
- D) £1,894.50 loss

16) (I) The Principal Strip and the Coupon Strip matching the maturity of the bond will likely trade at the same yield

(II) STRIPS have the same payment features as Zero Coupon bonds

(III) The Duration of a Zero Coupon bond is the same as the maturity of the bond

- A) (I) is true, (II) is false, (III) is false.
- B) (I) is false, (II) is true, (III) is true.
- C) (I) is true, (II) is false, (III) is true
- D) (I) is false, (II) is false, (III) is true

17) Basle 3

- A) Makes security prices more visible
- B) Makes it easier for Investment Banks to take trading positions
- C) Makes it more restrictive for Investment Banks to take trading positions
- D) Means banks have to charge the Buy Side for research.

18) (I) The Federal Reserve has a dual mandate focused on price stability and full employment

(II) The European Central Bank has a dual mandate focused on price stability and full employment

(III) The 'Beige Book' is a summary of current economic conditions across the 12 Federal Reserve Districts

- A) (I) is true, (II) is false, (III) is false
- B) (I) is false, (II) is true, (III) is true
- C) (I) is true, (II) is false, (III) is true
- D) (I) is false, (II) is false, (III) is true

19) In 2020 the price of US oil, for immediate delivery, reached an all-time low of minus \$40 per barrel because

- A) The minus \$40 price was a computer error and the price should have been plus \$40
- B) Demand for oil fell by 20%
- C) OPEC & Russia agreed to cut production
- D) There was practically no US storage capability with production still strong

20) What would be the annualised discount rate % if a Treasury Bill was purchased for \$9,650 maturing in 182 days for \$10,000?

- A) Discount Rate 7.19%
- B) Discount Rate 7.02%
- C) Discount Rate 7.17%
- D) Discount Rate 6.92%

21) The relationship between the US Prime Rate and the return on Commercial Paper can be described best by which of the following statements?

- A) The Prime Rate has no relationship with the return on Commercial Paper
- B) The Prime Rate is usually a few percentage points higher than the return on Commercial Paper, and both move up/down in a similar fashion
- C) The Prime Rate and the return on Commercial Paper are usually about the same interest rate
- D) Because Commercial Paper is riskier, returns on Commercial Paper always exceed the Prime Rate

22) The extraordinary rise in GameStop shares in 2021 is a good example of

- A) Day Trading
- B) A trading Short-Squeeze
- C) Hedge Funds deploying successful short trading strategies
- D) Retail Investors deploying successful short trading strategies

23) According to the Gordon growth model, what is an investor's valuation of a stock whose current dividend is \$1.00 per year if dividends are expected to grow at a constant rate of 10 percent over a long period of time and the investor's required return is 11 percent?

- A) \$110
- B) \$100
- C) \$11
- D) \$10

24) The US Dollar is the base currency for FX currency pair quotation purposes except for

- A) CAN \$, AUD, NZD
- B) EUR, GBP, AUD, NZD
- C) EUR, CAN \$, AUD, NZD
- D) EUR, GBP, CAN \$

25) Stage Three of a financial crisis in an advanced economy features

- A) A general increase in inflation
- B) Debt deflation
- C) An asset price boom
- D) A full-fledged financial crisis

26) If, as a financial professional, I believe US interest rates are going to gradually fall over the next two weeks, which investment strategy would it make sense to engage in?

- A) Sell short-maturity US Government Bonds
- B) Buy US Dollars
- C) Engage in a 14-day REPO and fund myself on an overnight basis
- D) Engage in a 14-day REVERSE REPO and fund myself on an overnight basis

27) Bond Issue Restrictive Covenants are related to

- A) Adverse Selection
- B) Moral Hazard
- C) Direct Finance
- D) Indirect Finance

28) Which yield curve theory best explains a 'humped' shaped yield curve?

- A) Pure Expectations Theory
- B) Liquidity Preference Theory
- C) Market Segmentation Theory
- D) None of the above

29) In 2022, with inflation rising, the Federal Reserve turned increasingly

- A) Dovish
- B) Hawkish
- C) Bullish
- D) Bearish

30) A Treasury Inflation-Protected Security (TIPS) has a real coupon rate of 3.5% per annum. An investor purchases \$100,000 as soon as the bond is issued. Inflation after 6 months is 3% per annum. Inflation over the following six-month period is 2% per annum. What dollar amount of coupon will the investor receive at the 12-month period?

- A) \$1794.01
- B) \$1750.00
- C) \$1786.04
- D) \$1776.25

Total 30 marks

SECTION B (40 MARKS)

SECTION B CONSISTS OF 10 QUESTIONS (1-10)

ANSWER 8 OUT OF THE 10 QUESTIONS

5 MARKS PER QUESTION

- 1) Why has there been a trend towards Passive versus Active investment over the last several years? How do Active managers argue they are still relevant and how are they strategically responding?
- 2) What are the core features of a Credit Default Swap? Describe the motive of the Protection Buyer and Protection Seller.
- 3) Why is there a Corporate Bond Liquidity problem today that didn't exist before the 2008 Financial Crisis?
- 4) Explain why Floating Rate Note (FRN) price volatility is typically significantly less than for bonds with a fixed coupon rate.
- 5) How did the structure of US Mortgage Bonds instigate the 2008 Financial Crisis?
- 6) How does a flat yield curve represent a different interest outlook under the Expectations Theory versus the Liquidity Preference Theory?
- 7) Explain how the problem of asymmetric information has led to the crucial role of financial intermediaries within the financial system.
- 8) Explain how Treasury STRIPS are created and what prevents arbitrage with normal Treasury securities.
- 9) What is a REPO? How might a Central Bank use it as a tool of monetary policy?
- 10) Give 3 reasons why higher interest rates caused significant falls in US stock market values in 2022

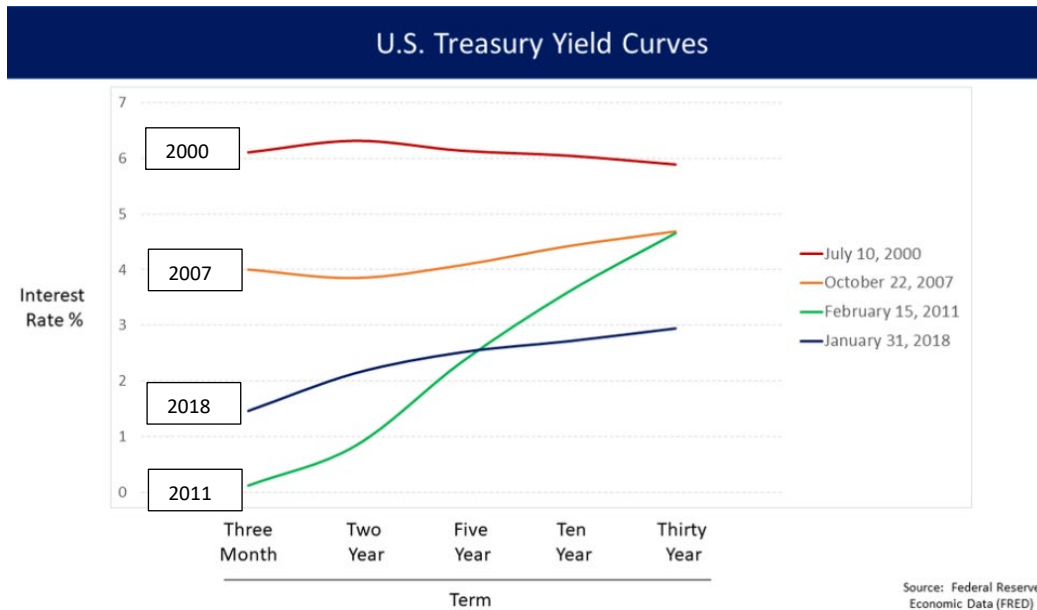
Total 40 marks

SECTION C (15 MARKS)

SECTION C CONSISTS OF 8 QUESTIONS a) – h)

ANSWER ALL QUESTIONS

Based on the below chart, provide very concise answers to **ALL** the following questions:



a) What would have been a profitable trade to put on involving both short-term and long-term bonds to take advantage of the yield curve shift between 2011 and 2018?

2 marks

b) Looking at the 2018 yield curve, suppose a highly UNSUCCESSFUL auction of 30-year bonds took place at that time. What impact would this have likely had on the yield curve?

1 mark

c) What does an inverted yield curve mean and what does it imply about perceptions of future economic activity?

2 marks

d) Suppose in 2000 the Federal Reserve had announced a new significant Quantitative Easing programme focused on 30-year bonds. What trade involving 2-year and 30-year bonds would likely have been profitable?

2 marks

e) What are the two main reasons a corporate bond issuer may request a bond rating from a Credit Rating Agency?

2 marks

f) Netflix issues two 20-year bonds: One is a \$200 Million in issue size, one is \$1Billion. All other things being equal, which bond is likely to have a lower yield and why?

2 marks

g) Where would the yield premium over US Treasuries of a 5-year USD Netflix bond trade relative to a 20-year USD Netflix bond? Why is this?

2 marks

h) Where would 'off-the-run' US Treasury bonds trade in relation to 'on-the-run' bonds and why?

2 marks

Total 15 marks

SECTION D (15 MARKS)

SECTION D CONSISTS OF 4 QUESTIONS a) – d)

ANSWER 3 OUT OF THE 4 QUESTIONS

FIVE MARKS FOR EACH QUESTION

In a couple of paragraphs explain **3 out of the 4** concepts and questions below.

- a) The significance of US Non-Farm Payroll data
- b) How should gold theoretically behave in a financial crisis and why did gold struggle to perform well in 2022?
- c) MiFID2 and its Buy/Sell side implications
- d) IPO Underpricing & 'Money left on the table' (*Include numerical examples*)

Total 15 marks

END OF EXAM