## 系所組別：財務金融研究所

考試科目：財務管理
※ 考生請注意：本試題可使用計算機。 請於答案卷（卡）作答，於本試題紙上作答者，不予計分。

## Section A：Multiple Choice Questions（80 marks， 4 points each）

1．If the use of supplier financing decreases and is replaced by cash financing for the same level of business activity，the cash cycle will
A）increase because days in payables decrease．
B）stay the same because the change is only on the operating cycle．
C）decrease because days in payables decrease．
D）stay the same because business activity does not change．
E）stay the same because cash is used for payment．

2．The Peruvian economy is predicted to average double digit inflation over the next three years of $40 \%$ per annum．The forecast for the U．S．is $3 \%$ per annum．If the current exchange rate is $\$ .2777 /$ Sol，how much will a Sol cost you in three years？
A）$\$ 0.1106$
B）$\$ 0.1421$
C）$\$ 0.1928$
D）$\$ 0.1986$
E）$\$ 0.2334$

3．Studies on the timing of corporate issues of new equities suggest that corporations tend to offer
A）new issues after stock price increases．This behavior is consistent with the weak form of the efficient market hypothesis．
B）new issues after stock price increases．This behavior is inconsistent with the weak form of the efficient market hypothesis．
C）new issues randomly with regard to stock price changes．This behavior is consistent with the weak form of the efficient market hypothesis．
D）new issues randomly with regard to stock price changes．This behavior is inconsistent with the weak form of the efficient market hypothesis．
E）None of the above．

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4．The Lory Company had net earnings of $\$ 127,000$ this past year．Dividends were paid of $\$ 38,100$ on the company＇s equity of $\$ 1,587,500$ ．If Lory has 100,000 shares outstanding with a current market price of $\$ 11.625$ per share，what is the required rate of return？
A） $4.2 \%$
B） $6 \%$
C） $9 \%$
D） $14 \%$
E）None of the above．

5．An acquisition may take place because of a real or perceived strategic advantage．An example of a strategic advantage would be
A）an aircraft manufacturer buying a laser guidance company for possible advanced flight control without pilots．
B）a manufacturer integrating their supply by acquiring downline．
C）a corporation completing a spin－off．
D）a corporation out－sourcing to achieve cost economies．
E）None of the above．

6．To protect against interest rate risk，the mortgage banker should
A）buy futures，as this position will hedge loses if rates rise．
B）sell futures，as this position will hedge losses if rates rise．
C）sell futures，as this position will add to his gains if rates rise．
D）buy futures，as this position will add to his gains if rates rise．
E）None of the above．

7．If a financial institution has equated the dollar effects of interest rate risk on the assets with the dollar effects on the liabilities，it has engaged in
A）a long hedge．
B）a short hedge．
C）a protected swap．
D）immunizing interest rate risk．
E）None of the above．
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8．A firm has 100 shares of stock and 40 warrants outstanding．The warrants are about to expire，and all of them will be exercised．The market value of the firm＇s assets is $\$ 2,000$ ，and the firm has no debt．Each warrant gives the owner the right to buy 2 shares at $\$ 15$ per share．What is the price per share of the stock？

A）$\$ 11.11$
B）$\$ 15.00$
C）$\$ 15.98$
D）$\$ 16.67$
E）$\$ 17.78$ ．

9．The value of the options awarded executives is much less than face value to the executives because
A）the value to the executive depends on the stock price being greater than the exercise price．
B）the options must be held beyond the freeze－out period．
C）a highly undiversified portfolio can have a large drop in value with high variance stocks．
D）All of the above．
E）None of the above．

10．The payoff diagram for a put with the same exercise price and premium as the call on the same underlying asset with the same maturity is
A）the inverse of the call diagram along the put price．
B）unrelated to the call diagram no matter what the exercise price．
C）the mirror image of the call diagram around the exercise price．
D）exactly the same as the call diagram for the given exercise price．
E）None of the above．

11．A firm commitment arrangement with an investment banker occurs when
A）the syndicate is in place to handle the issue．
B）the spread between the buying and selling price is less than one percent．
C）the issue is solidly accepted in the market evidenced by a large price increase．
D）when the investment banker buys the securities for less than the offering price and accepts the risk of not being able to sell them．
E）when the investment banker sells as much of the security as the market can bear without a price decrease．
（背面仍有題目，請繥績作答）
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12．On the date of record the stock price drop is
A）a full adjustment for the dividend payment．
B）a partial adjustment for the dividend payment because of the tax effect．
C）zero because it happened on ex－dividend date．
D）zero because it happens on payment date．
E）None of the above．

13．The Tip－Top Paving Co．has an equity cost of capital of $16.97 \%$ ．The debt to value ratio is .6 ，the tax rate is $34 \%$ ，and the cost of debt is $11 \%$ ．What is the cost of equity if Tip－Top was unlevered？
A） $0.08 \%$
B） $3.06 \%$
C） $9.03 \%$
D） $11.97 \%$
E） $14.0 \%$ ．

14．When shareholders pursue selfish strategies such as taking large risks or paying excessive dividends， these will result in
A）no action by debtholders since these are equity holder concerns．
B）positive agency costs，as bondholders impose various restrictions and covenants，which will diminish firm value．
C）investments of the same risk class that the firm is in．
D）undertaking scale enhancing projects．
E）lower agency costs，as shareholders have more control over the firm＇s assets．

15．A firm has a debt－to－equity ratio of 1 ．Its cost of equity is $16 \%$ ，and its cost of debt is $8 \%$ ．If there are no taxes or other imperfections，what would be its cost of equity if the debt－to－equity ratio were 0 ？
A） $8 \%$
B） $10 \%$
C） $12 \%$
D） $14 \%$
E） $16 \%$
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16．Slippery Slope Roof Contracting has an equity beta of 1.2 ，capital structure with $2 / 3$ debt，and a zero tax rate．What is their asset beta？
A） 0.40
B） 0.72
C） 1.20
D） 1.80
E）None of the above

17．At stage 2 of the decision tree it shows that if a project is successful，the payoff will be $\$ 53,000$ with a $2 / 3$ chance of occurrence．There is also the $1 / 3$ chance of a $\$-24,000$ payoff．The cost of getting to stage 2 （ 1 year out）is $\$ 44,000$ ．The cost of capital is $15 \%$ ．What is the NPV of the project at stage 1 ？
A）$\$-13,275$
B）$\$-20,232$
C）$\$ 2,087$
D）$\$ 7,536$
E）Can not be calculated without the exact timing of future cash flows．

18．Angela is able to pay $\$ 230$ a month for 6 years on a car loan．If the interest rate is 7.9 percent，how much can she afford to borrow to buy a car？
A）$\$ 10,455.54$
B）$\$ 11,408.17$
C）$\$ 12,528.28$
D）$\$ 12,666.67$
E）$\$ 13,154.54$

19．The SML is the equilibrium pricing relationship for
A）efficient portfolios．
B）single securities．
C）inefficient portfolios．
D）All of the above．
E）None of the above．
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20．The Carnation Chemical Company is investing in an incinerator to dispose of waste．The incinerator costs $\$ 2.5$ million and will generate end－of－year cash of $\$ 1$ million for the next 3 years．The internal rate of return for this project is
A） $6.4 \%$ ．
B） $7.6 \%$ ．
C） $8.7 \%$ ．
D） $9.0 \%$ ．
E） $9.7 \%$ ．

## Section B：Essay Questions（20 marks）

1．Explain why firms issue convertible debt．Please provide your answer in English ONLY．

2．Explain why non－financial firms，such as Apple Inc．，generally hold a high level of cash and marketable securities．Please provide your answer in English ONLY．

