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

1．A corporate bond with a face value of $\$ 1,000$ matures in 4 years and has a $8 \%$ coupon paid at the end of each year．The current price of the bond is $\$ 932$ ．What is the yield to maturity for this bond？
A） $5.05 \%$
B） $6.48 \%$
C） $8.58 \%$
D） $10.15 \%$
E） $11.92 \%$

2．A stock you are interested in paid a dividend of $\$ 1$ last year．The anticipated growth rate in dividends and earnings is $20 \%$ for the next 2 years before settling down to a constant $5 \%$ growth rate．The discount rate is $10 \%$ ．Calculate the expected price of the stock．
A）$\$ 15.38$
B）$\$ 20.50$
C）$\$ 26.62$
D）$\$ 26.77$
E）$\$ 27.27$

3．Which of the following statements is true？
A）The yield to maturity is a time－weighted average of spot rates．
B）The spot rate is always higher than the yield to maturity．
C）The spot rate is a weighted average of the yields to maturity．
D）The yield to maturity is always higher than the spot rate．
E）Both A \＆D．

4．What can you deduce about forward rates of interest if the liquidity preference hypothesis of the term structure is correct？
A）The forward rate is less than investor＇s expectations of next year＇s one year spot interest rate．
B）The forward rate is greater than investor＇s expectations of next year＇s one year spot interest
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C）The forward rate is equal to investor＇s expectations of next year＇s one year spot interest rate．
D）The forward rate is equal to the risk－free interest rate．

5．If its yield to maturity is less than its coupon rate，a bond will sell at a $\qquad$ and increases in market interest rates will $\qquad$ ．
A）discount；decrease this discount．
B）discount；increase this discount．
C）premium；decrease this premium．
D）premium；increase this premium．
E）None of the above．

6．Inflation is treated properly in NPV analysis by
A）discounting nominal cash flows by a nominal discount rate．
B）discounting real cash flows by a real discount rate．
C）discounting nominal cash flows by a real discount rate．
D）discounting real cash flows by a nominal discount rate．
E）Both A and B．

7．In a decision tree，caution should be used in analysis because
A）early stage decisions are probably riskier and should not likely use the same discount rate．
B）if a negative NPV is actually occurring，management should opt out of the project and minimize their loss．

C）decision trees are only used for planning，not actually daily management．
D）Both A and C ．
E）Both A and B．

8．The return pattern on your favorite stock has been $5 \%, 8 \%,-12 \%, 15 \%, 21 \%$ over the last five years．What are your average return and holding period return over the last 5 years？
A） $4.5 \% ; 6.5 \%$
B） $7.4 \% ; 38.9 \%$
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C） $7.4 \% ; 7.76 \%$
D） $7.4 \% ; 76.73 \%$
E）None of the above．

9．Cowboy Curtiss＇Cowboy Hat Company recently completed a merger．When valuing the combined firm after the merger，which of the following is an example of the type of common mistake that can occur？
A）The use of market values in valuing either the new firm．
B）The inclusion of cash flows that are incremental to the decision．
C）The use of Curtiss＇discount rate when valuing the cash flows of the entire company．
D）The inclusion of all relevant transactions cost associated with the acquisition．
E）None of the above．

10．If investors possess homogeneous expectations over all assets in the market portfolio，when riskless lending and borrowing is allowed，the market portfolio is defined to
A）be the same portfolio of risky assets chosen by all investors．
B）have the securities weighted by their market value proportions．
C）be a diversified portfolio．
D）All of the above．
E）None of the above．

11．Two firms have the same operating structure and the same operating systematic risk，$B=.8$ ． Firm 1 has $20 \%$ debt in their capital structure while Firm 2 has 4 units of debt for every 7 units of equity．The tax rate faced by both firms is $40 \%$ ．The debt beta is assumed to zero．What is the difference in systematic risk between the riskier firm and the less risky firm？
A） 0.10
B） 0.15
C） 0.26
D） 0.30
E）None of the above．

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## 考試科目：財務管理

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12．Preferred stock may be desirable to issue for which of the following reason（s）？
A）If there is no taxable income，preferred stock does not impose a tax penalty．
B）The failure to pay preferred dividends，cumulative or noncumulative，will not cause bankruptcy．
C）Preferred dividends are not tax deductible and therefore will not provide a tax shield but will reduce net income．
D）Both B and C．
E）Both A and B．

13．A financial lease has which as its primary characteristics
A）is fully amortized，lessee maintains equipment and there is no renewal clause and no cancellation clause．
B）is not fully amortized，lessor maintains equipment and there is a renewal clause but no cancellation clause．
C）is fully amortized，lessor maintains equipment and there is a renewal clause and a no cancellation clause．
D）is not fully amortized，lessor maintains equipment and there is a renewal clause．
E）is fully amortized，lessee maintains equipment and there is a renewal clause and a no cancellation clause．

14．A firm has zero debt in its capital structure．Its overall cost of capital is $9 \%$ ．The firm is considering a new capital structure with $40 \%$ debt．The interest rate on the debt would be $4 \%$ ． Assuming that the corporate tax rate is $34 \%$ ，its cost of equity capital with the new capital structure would be？
A） $11.2 \%$
B） $10.3 \%$
C） $9.7 \%$
D） $8.6 \%$
E）None of the above．
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15．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．

16．A firm with a 1,000 stockholders plans to terminate operations at the end of two years．Investors are certain that the firm will generate cash flows of $\$ 1,000$ at the end of the first year and $\$ 50,000$ at the end of the second year．The risk－free rate is $10 \%$ ．Which of the following is true，ignoring transaction costs and taxes？
A）The present value of these payments is $\$ 42,231$ if payments of $\$ 1,000$ and $\$ 50,000$ are made． This present value will decrease if the firm borrows to increase payment at the end of the first year．
B）The present value of these payments is $\$ 42,231$ if payments of $\$ 1,000$ and $\$ 50,000$ are made． This present value will increase if the firm borrows to increase payment at the end of the first year．
C）The present value of these payments is $\$ 42,231$ if payments of $\$ 1,000$ and $\$ 50,000$ are made． This present value will remain the same if the firm borrows to increase payment at the end of the first year．
D）The present value of these payments is less than $\$ 42,231$ if payments of $\$ 1,000$ and $\$ 50,000$ are made．This present value will change if the firm borrows to increase payment at the end of the first year．The direction of the change will depend on the type of investors that currently hold stock．
E）There is no way to calculate present value without being given the proper discount rate for the firm．The present value would change if the firm borrows to increase payments at the end of year one．

17．Verma Violin Manufacturing Corporation has issued debt with $\$ 10$ million of principal due．In terms of viewing the equity of the firm as a call option，what happens to the equity of the firm if the cash flow of the firm is less than $\$ 10$ million？

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A）The option is out－of－the－money，the stockholders walk away，and the bondholders receive the entire cash flow．

B）The option is in－the－money and the bondholders earn the entire cash flow．
C）The option is in－the－money and the stockholders earn the difference between the cash flow and the bondholder＇s promised payment．
D）The option is out－of－the－money，and the stockholders make up the difference so that the bondholders receive full payment．
E）None of the above．

18．Suppose a stock can be purchased for $\$ 8$ ，a put option on the stock can be purchased for $\$ 1.50$ ， and a call option on the stock can be written（i．e．，sold）for $\$ 1.00$ ．If holding these positions in combination can guarantee a payoff of $\$ 10$ at the end of the year，then what must be the risk－free rate if no arbitrage opportunities exist？

A） $5.50 \%$
B） $12.50 \%$
C） $17.65 \%$
D） $33.33 \%$
E） $35.57 \%$

19．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．

20．The gain from exercising a warrant is similar to the gain from exercising a call option except
A）the gain on a warrant is greater by the fraction of warrant shares divided by total shares．
B）the gain on a warrant is limited by the firm＇s value after being reduced by the debt of the firm．
C）the gain on a warrant is decreased by the fraction of original shares divided by total post exercise shares．

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D）Both A and B ．
E）Both B and C．

## Section B：Essay Questions（20 marks）

／．Explain whether or not an investor should expect all of his or her investments to have zero net present values in an efficient market．（ 10 pts ）

2．What is cross hedging？Do you expect firms to use this method of risk management？What are some of the drawbacks？（ 10 pts ）

