ECO 332 : VALUATION AND PORTFOLIO MANAGEMENT

VARIANT A

PART A (1 mark each. Choose the correct option – only 1)

Time : 50 minutes **Max Marks : 30**

1. Which one of the following best describes the purpose of derivatives markets?

A. Transferring risk from one party to another
B. Investing for a short time period to earn a small rate of return
C. Investing for retirement
D. Earning interest income

2. An individual who goes short in a futures position _____

A. commits to delivering the underlying commodity at contract maturity
B. commits to purchasing the underlying commodity at contract maturity
C. has the right to deliver the underlying commodity at contract maturity
D. has the right to purchase the underlying commodity at contract maturity

3. A __________ gives its holder the right to sell an asset for a specified exercise price on or before a specified expiration date.

A. call option
B. futures contract
C. put option
D. interest rate swap

4. June call and put options on Doomsday Ltd are available with exercise prices of Rs.30, Rs.35, and Rs.40. Among the different exercise prices, the call option with the _____ exercise price and the put option with the _____ exercise price will have the greatest value.

A. Rs.40; Rs.30
B. Rs.30; Rs.40
C. Rs.35; Rs.35
D. Rs.40; Rs.40

5. Ownership of a call option entitles the owner to the __________ to __________ a specific stock, on or before a specific date, at a specific price.

A. right; buy
B. right; sell
C. obligation; buy
D. obligation; sell

6. Eurodollars are ________

A. dollar-denominated deposits at any foreign bank or foreign branch of an American bank
B. dollar-denominated bonds issued by firms outside their home market
C. currency issued by Euro Disney and traded in France
D. dollars that wind up in banks as a result of money-laundering activities

7. If you are holding a premium bond, you must expect a _______ each year until maturity. If you are holding a discount bond, you must expect a _______ each year until maturity. (In each case assume that the yield to maturity remains stable over time.)

A. capital gain; capital loss
B. capital gain; capital gain
C. capital loss; capital gain
D. capital loss; capital loss

8. A Japanese firm issued and sold a pound-denominated bond in the United Kingdom. A U.S. firm issued bonds denominated in dollars but sold the bonds in Japan. Which one of the following statements is correct?

A. Both bonds are examples of Eurobonds.
B. The Japanese bond is a Eurobond, and the U.S. bond is termed a foreign bond.
C. The U.S. bond is a Eurobond, and the Japanese bond is termed a foreign bond.
D. Neither bond is a Eurobond.

9. A __________ bond gives the bondholder the right to cash in the bond before maturity at a specific price after a specific date.

A. callable
B. coupon
C. puttable
D. Treasury

10. Consider two bonds, A and B. Both bonds presently are selling at their par value of Rs.1,000. Each pays interest of Rs.120 annually. Bond A will mature in 5 years, while bond B will mature in 6 years. If the yields to maturity on the two bonds change from 12% to 14%, _________.

A. both bonds will increase in value but bond A will increase more than bond B
B. both bonds will increase in value but bond B will increase more than bond A
C. both bonds will decrease in value but bond A will decrease more than bond B
D. both bonds will decrease in value but bond B will decrease more than bond A

11. Everything else equal, the __________ the maturity of a bond and the __________ the coupon, the greater the sensitivity of the bond's price to interest rate changes.

A. longer; higher
B. longer; lower
C. shorter; higher
D. shorter; lower

12. A coupon bond that pays interest of Rs.60 annually has a par value of Rs.1,000, matures in 5 years, and is selling today at a Rs.75.25 discount from par value. The current yield on this bond is _________.

A. 6%
B. 6.49%
C. 6.73%
D. 7%

13. A coupon bond that pays interest annually has a par value of Rs.1,000, matures in 5 years, and has a yield to maturity of 12%. If the coupon rate is 9%, the intrinsic value of the bond today will be _________.

A. Rs.856.04
B. Rs.891.86
C. Rs.926.47
D. Rs.1,000

14. A zero-coupon bond has a yield to maturity of 5% and a par value of Rs.1,000. If the bond matures in 16 years, it should sell for a price of __________ today.

A. Rs.458.11
B. Rs.641.11
C. Rs.789.11
D. Rs.1,100.11

15. A bond's price volatility _________ at _________ rate as maturity increases.

A. increases; an increasing
B. increases; a decreasing
C. decreases; an increasing
D. decreases; a decreasing

16. A zero-coupon bond is selling at a deep discount price of Rs.430. It matures in 13 years. If the yield to maturity of the bond is 6.7%, what is the duration of the bond?

A. 6.7 years
B. 8 years
C. 10 years
D. 13 years

17. You write one Systems Ltd July 120 call contract (100 shares per contract) for a premium of Rs.4. You hold the option until the expiration date, when Systems stock sells for Rs.121 per share. You will realize a ______ on the investment.

A. Rs.300 profit
B. Rs.200 loss
C. Rs.600 loss
D. Rs.200 profit

18. An American put option gives its holder the right to _________

A. buy the underlying asset at the exercise price on or before the expiration date
B. buy the underlying asset at the exercise price only at the expiration date
C. sell the underlying asset at the exercise price on or before the expiration date
D. sell the underlying asset at the exercise price only at the expiration date

19. The writer of a put option _______________.

A. agrees to sell shares at a set price if the option holder desires
B. agrees to buy shares at a set price if the option holder desires
C. has the right to buy shares at a set price
D. has the right to sell shares at a set price

20. A put option on Thunderbolt Ltd., has an exercise price of Rs.45. The current stock price is Rs.41. The put option is _________

A. at the money
B. in the money
C. out of the money
D. knocked out

PART B (2 MARKS EACH)

Calculate the value to 2 decimal places

1. Compute the modified duration of a 9% coupon, 3-year corporate bond with a yield to maturity of 12%.

2. To create a portfolio with a duration of 4 years using a 5-year zero-coupon bond and a 3-year 8% annual coupon bond with a yield to maturity of 10%, one would have to invest _______(%) of the portfolio value in the zero-coupon bond.

3. 3.A bond with a 9-year duration is worth Rs.1,080, and its yield to maturity is 8%. If the yield to maturity falls to 7.84%, you would predict that the new value of the bond will be approximately _________

4. A bond currently has a price of Rs.1,050. The yield on the bond is 6%. If the yield increases 25 basis points, the price of the bond will go down to Rs.1,030. The duration of this bond is ____ years.

5. You purchased a 5-year annual-interest coupon bond 1 year ago. Its coupon interest rate was 6%, and its par value was Rs.1,000. At the time you purchased the bond, the yield to maturity was 4%. If you sold the bond after receiving the first interest payment and the bond's yield to maturity had changed to 3%, your annual total rate of return on holding the bond for that year would have been approximately ________(%).

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VARIANT A

Name ____

Roll No.

Total Marks obtained out of 30

____

PART A [1 mark each]

Qs No.	Answer (correct alternative)	Qs. No.	Answer (correct alternative)
1		11	
2		12	
3		13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		20	

Marks in Part A ___________________________

PART B (answer up to 2 decimal places) [2 marks each]

Qs 1	Qs 2	Qs 3	Qs 4	Qs 5

Marks in Part B_________________________