

1. Investment X offers to pay you 40,000 riyals per year for nine years, whereas Investment Y offers to pay you 60,000 riyals per year for five years.
 - (1) Which of these cash flow streams has the higher present value if discount rate is 5 percent?
 - (A) 260,759.54; 240,000 (B) 300,000; 200,000 (C) 284,312.87; 259,768.60
 - (D) 259,687.54; 360,586.35
 - (2) If the discount rate is 22 percent? (A) 151,451.40; 171,818.39 (B) 356,789.25; 236,258.79 (C) 369,725.32; 154,789.24
2. If you put up 278,000 Egyptian pounds today in exchange for a 7.65 percent, 14-year annuity, what will the annual cash flow be? (A) 33,000 (B) 33,038.16 (C) 32,452.35 (D) 34,321.25
3. Dinero Bank offers you a \$50,000, seven-year term loan at 9 percent annual interest. What will your annual loan payment be? (A) 6,852.32 (B) 9,256.32 (C) 9,934.53 (D) 8,575.21
4. The Perpetual Life Insurance Co. is trying to sell you an investment policy that will pay you and your heirs \$15,000 per year forever. Suppose the Perpetual Life Insurance Co. told you the policy costs \$195,000. At what interest rate would this be a fair deal? (A) 8% (B) 7.69% (C) 8.59% (D) 6.98%
5. What is the future value of 800 Sudanese dinars in 10 years assuming an interest rate of 10.4 percent compounded semiannually? (A) 2,204.98 (B) 2,300.58 (C) 2,569.54 (D) 2,436.95
6. You want to buy a new sports coupe for €56,850, and the finance office at the dealership has quoted you an 5.6 percent APR loan for 60 months to buy the cars.
 - (1) What will your monthly payments be? (A) 1,088.53 (B) 963.53 (C) 1,108.69 (D) 1,206.31
 - (2) What is the effective annual rate on this loan? (A) 5.69% (B) 6.45% (C) 5.75% (D) 4.75%
7. Burma Life Insurance Co. is selling a perpetuity contract that pays NMK 1,150 monthly. The contract currently sells for NMK 58,000.
 - (1) What is the monthly return on this investment vehicle? (A) 2% (B) 1.98% (C) 1.88% (D) 1.58%
 - (2) What is the APR? (A) 33.65% (B) 20.56% (C) 23.79% (D) 28.62%
 - (3) The effective annual return? (A) 26.57% (B) 23.31% (C) 27.98% (D) 25.69%
8. You are to make monthly deposits of \$250 into a retirement account that pays 11 percent interest compounded monthly. If your first deposit will be made one month from now, how large will your retirement account be in 20 years? (A) 216,409.51 (B) 220,358.32 (C) 220,458.79 (D) 230,458.15
9. In previous problem, suppose you make \$3,000 annual deposits into the same retirement account. How large will your account balance be in 20 years? (A) 215,704.25 (B) 256,785.24 (C) 205,714.53 (D) 195,889.34
10. If the appropriate discount rate for the following cash flow is 9.75 percent per year, what is the present value of the cash flows? (A) 10,015.75 (B) 9,995.25 (C) 12,005.31 (D) 10,050.69

Year	Cash flow
1	CZK 2,800
2	0
3	8,100
4	1,940

11. You are looking at an investment that has an effective annual rate of 16 percent.
- (1) What is the effective semiannual return? (A)8.52% (B)6.98% (C)7.02% (D)7.70%
 - (2) The effective quarterly return? (A)4.00% (B)3.52% (C)3.78% (D)3.69%
 - (3) The effective monthly return? (A)1.52% (B) 1.24% (C)1.36% (D)1.08%
12. Suppose an invest offers to triple your money in 12 months (don't believe it). What rate of return per quarter are you being offered? (A)30.58% (B)32.26% (C)31.61% (D)29.35%
13. Borderline Co. issued 11-year bonds one year ago at a coupon rate of 8.2 percent. The bonds make semiannual payments. If the YTM on these bonds is 7.4 percent, what is the current bond price? (A)1,055.83 (B)1,2305.63 (C)1,105.36 (D)9,526.35
14. Aragorn Co. has 10 percent coupon bonds on the market with nine years left to maturity. The bonds make annual payments. If the bond currently sells for \$884.50, what is its YTM? (A)13.25% (B)12.36% (C)12.18% (D)12.96%
15. Superstar Enterprises has bonds on the market making annual payments, with 16 years to maturity, and selling for \$870. At this price, the bonds yield 6.8 percent. What must the coupon rate be on Superstar's bonds? (A)5.44% (B)5.69% (C)6.32% (D)5.78%
16. DTO AG, has 9 percent coupon bonds on the market that have 10 years left to maturity. The bonds make annual payments. If the YTM on these bonds is 6 percent, what is the current bond price? (A)1,220.58 (B)1,220.80 (C)1365.20 (D)1198.20
17. If Treasury bills are currently paying 6.4 percent and the inflation rate is 4.5 percent,
- (1) what is the approximate real rate of interest? (A) 1.69% (B) 3.6% (C)1.9% (D)1.58%
 - (2) The exact real rate? (A)1.82% (B)1.69% (C)1.79% (D)1.98%
18. Suppose the real rate is 4.2 percent and the inflation rate is 2.5 percent. What rate would you expect to see on a Treasury bill? (A)7.5% (B)6.8% (C)6.4% (D) 7.2%
19. You purchase a bond with a coupon rate of 6.5 percent, and a clean price of \$890. If the next semiannual coupon payment is due in three months, what is the invoice price? (A)910.25 (B)825.21 (C)964.85 (D)906.25
20. The Cairo Jewel Co., just paid a dividend of 8.40 pounds per share on its stock. The dividends are expected to grow at a constant rate of 6 percent per year, indefinitely. If investors require a 12 percent return on The Cairo Jewel Co. stock, (1) what is the current price? (A)148.40 (B)150.20 (C)162.35 (D)145.69
- (2) What will the price be in three years? (A)178.36 (B)176.65 (C)185.36 (D)179.65

(3) In 15 years? (A)355.65 (B) 350.25 (C)320.58 (D)360.25

21. The Johannesburg Diamond Company pays a constant 89 rand dividend on its stock. The company will maintain this dividend for the next eight years and will then cease paying dividends forever. If the required return on this stock is 10 percent, what is the current share price?(A)256.36 (B) 458.69 (C)482.31 (D)474.81

22. Ayden, Inc. has an issue of preferred stock outstanding that pays an \$9.50 dividend every year, in perpetuity. If this issue currently sells for \$120 per share, what is the required return?(A)7.92% (B)7.82% (C) 8.02% (D)6.98%

23. What is the payback period for the following set of cash flows?(A)2.52 (B)2.95 (C)2.32 (D) 2.24

Year	Cash Flow
0	-\$4,800
1	1,200
2	2,500
3	3,400
4	1,700

24. An investment project cost 500,000 Serbian dinars and has annual cash flows of 110,000 dinars for six years.

(1) What is the discounted payback period if the discount rate is zero percent?(A)4.55 (B)4.65 (C)4.05 (D) 4.62

(2) What if the discount rate is 5 percent? (A)5.29 (B)4.96 (C)5.69 (D)5.48

25. For the following cash flows, the firm uses the NPV decision rule.

(1) At a required return of 11 percent, should the firm accept this project?(A) accept (B)reject

(2) What if the required return was 30 percent? (A) accept (B)reject

Year	Cash Flows
0	-\$30,000
1	10,000
2	14,000
3	11,000

26. What is the IRR of the following set of cash flows? (A)28.16% (B)27.98% (C) 23.65% (D) 30.25%

Year	Cash Flow
0	-\$8,000
1	2,200
2	4,000

27. For cash flows in previous problem,

- (1) What is the NPV at a discount rate of zero percent? (A)5,300 (B)5,900 (C) 5,200 (D) 5,490
- (2) What if the discount rate is 10 percent? (A)2,892.35 (B) 2,696.37 (C)2,797.90 (D)2,895.36
- (3) If it is 20 percent? (A)974.54 (B)952.31 (C)985.14 (D)967.85
- (4) If it is 30 percent? (A)-365.25 (B)-395.08 (C)-369.52 (D)-385.55

28. What is the profitability index for the following set of cash flows

- (1) if the relevant discount rate is 8 percent? (A) 1.196 (B)1.236 (C)1.065 (D)1.205
- (2) What if the discount rate is 12 percent? (A)1.12 (B)1.15 (C)1.17 (D)1.19
- (3) If it is 25 percent? (A)0.952 (B)0.935 (C)0.902 (D)0.912

Year	Cash Flow
0	-\$7,000
1	3,200
2	3,900
3	2,600

29. Consider the following two mutually exclusive projects, with cash flows given in Australia dollars:

Year	Cash Flow (A)	Cash Flow (B)
0	-Au\$210,000	-Au\$21,000
1	15,000	11,000
2	30,000	9,000
3	30,000	11,000
4	370,000	9,000

Whichever project you choose, if any, you require a 15 percent return on your investment.

- (1) If you apply the payback criterion, which investment will you choose? (A)A (B)B
- (2) If you apply the discounted payback criterion, which investment will you choose? (A)A (B)B
- (3) If you apply the NPV criterion, which investment will you choose? (A)A (B)B
- (4) If you apply the IRR criterion, which investment will you choose? (A)A (B)B
- (5) If you apply the profitability index criterion, which investment will you choose? (A)A (B)B
- (6) Based on your answers in (1) through (5), which project will you finally choose? (A)A (B)B

答案卷

1(1) C	(2) A	2 B	3 C	4 B	5 A	6(1) A	(2) C	7(1) B	(2) C
(3) A	8 A	9 C	10 A	11(1)D	(2) C	(3) B	12 C	13 題目資訊不足 (應加入:公司債面值為\$1,000)	14 題目資訊不足 (應加入:公司債面值為\$1,000)
15 題目資訊不足 (應加入:公司債面值為\$1,000)	16 題目資訊不足 (應加入:公司債面值為\$1,000)	17(1)C	(2) A	18 B	19 題目資訊不足 (應加入:公司債面值為\$1,000)	20(1)A	(2) B	(3) A	21 D
22 A	23 C	24(1)A	(2) A	25(1)B	(2) B	26 A	27(1)6300	(2)3391.44	(3)1298.61
(4) -253.98	28(1)A	(2) A	(3) D	29(1)B	(2) B	(3) A	(4) B	(5) B	(6) A

請同學們注意：

1. 此次考題題目均來自於網站上的課本習題，同學們可以找出，並參考網站上的課本解答，了解如何運算。
2. 因為考前有承諾大家「題目中不會出現複雜的運算」。因此，此次考題中只要次方次數超過10次，則均予送分。
3. 第27題(1)(2)(3)(4)這四小題，網站上的課本解答並不正確，所以選擇題的選項上的數字也都不正確。正確的數字如上表所示。這四小題也均送分。
4. 題目資訊不足的部份是指：未列出公司債面值為\$1,000。所以這些題目也送分。
5. 此次考題出現如上述的許多問題，引起大家的困擾，在此跟各位同學致歉。
6. 祝福同學們新年愉快：不能送大家「紅包」，只好送大家「分數」了。
7. 下學期財管繼續加油囉!