

**BEAM034 / BEMM689**

UNIVERSITY OF EXETER

BUSINESS SCHOOL

May/ June 2009

**CORPORATE FINANCE**

Module Convenor: Claire Lavers

Duration: TWO HOURS

**In Section A, you must answer ALL multiple choice questions - use the answer sheet provided.**

**In Section B, you must answer BOTH questions.**

**Only approved silent non-programmable calculators are permitted.**

**This is a closed note paper.**

## SECTION A

You must answer all 15 multiple choice questions – use the answer sheet provided.

Each question has only ONE correct answer (a, b, c, d or e). Each question is worth 3 points.

### Questions

- 1 When an entire security issue is directly sold to institutional investors, it is called
  - (a) a public issue
  - (b) a private placement
  - (c) an initial public offering
  - (d) an introduction
  - (e) none of the above
  
- 2 Firm A has a value of \$100 million, and B has a value of \$60 million. Merging the two would allow a cost savings with a present value of \$20 million. Firm A purchases B for \$65 million. How much do firm A's shareholders gain from this merger?
  - (a) \$30 million
  - (b) \$20 million
  - (c) \$15 million
  - (d) \$5 million
  - (e) None of the above
  
- 3 What would be the required rate of return for equity investors if a share sells for £40 and will pay a £4.40 dividend that is expected to grow at a constant rate of 5%?
  - (a) 7.6%
  - (b) 12.0%
  - (c) 12.6%
  - (d) 16.0%
  - (e) None of the above
  
- 4 Firms facing financial distress may pass up positive NPV projects rather than commit new equity because:
  - (a) they prefer to finance with debt.
  - (b) the benefits may be shared with the bondholders.
  - (c) no cash is available for dividends.
  - (d) there is no interest tax shield associated with equity.
  - (e) None of the above

5		AAA	AA	A	BBB
	<b>AAA</b>	0.9050	0.0859	0.0074	0.0006
	<b>AA</b>	0.0076	0.9074	0.0762	0.0064
	<b>A</b>	0.0009	0.0262	0.9069	0.0547
	<b>BBB</b>	0.0003	0.0027	0.0615	0.8653
	<b>BB</b>	0.0003	0.0016	0.0070	0.0738
	<b>B</b>	0.0000	0.0008	0.0034	0.0053
	<b>CCC</b>	0.0015	0.0000	0.0046	0.0109
	<b>D</b>	0.0000	0.0000	0.0000	0.0000
	<b>E</b>	0.0000	0.0000	0.0000	0.0000

According to the two period transition matrix above, what are the probabilities of

- (i) a bond rated AAA today being rated AA in the next period
- (ii) a bond rated BBB being rated AAA in the next period

- (a) 0.0859 and 0.0003
- (b) 0.9050 and 0.0003
- (c) 0.9050 and 0.8653
- (d) 0.0859 and 0.8653
- (e) 0.0859 and 0.0006

6 The Indirect costs of bankruptcy are borne principally by:

- (a) Bondholders
- (b) Shareholders
- (c) Managers
- (d) The national government
- (e) None of the above

7 What is the return on equity for a firm with 15% WACC, a 10% return on debt, and a 0.75 debt/equity ratio?

- (a) 18.75%
- (b) 19.00%
- (c) 20.00%
- (d) 23.75%
- (e) 26.25%

Turn over/...

- 8** When new securities are sold by a firm, it is called
- (a) Primary market transaction
  - (b) Secondary market transaction
  - (c) O-T-C market transaction
  - (d) A seasoned equity offering
  - (e) None of the above
- 9** If a defined benefit plan has pension assets of \$150 million and a pension liability of \$140 million, then which of the following is true:
- (a) The plan has a surplus of \$10 million
  - (b) The plan has a surplus of \$110 million
  - (c) The plan has a deficit of \$10 million
  - (d) The plan has a deficit of \$110 million
  - (e) None of the above
- 10** An example of a pension scheme where current contributions are paid to current pensioners is
- (i) A public (social security) pension
  - (ii) A defined benefit pension
  - (iii) A personal pension
- (a) i only
  - (b) ii only
  - (c) iii only
  - (d) i and ii only
  - (e) ii and iii only
- 11** Which of the following are not indirect costs of financial distress?
- (a) Impaired ability to do business
  - (b) Selling assets at lower than market value
  - (c) Loss of human capital
  - (d) Administrative costs
  - (e) Agency costs

- 12** Mergers and Acquisitions in the same industry and at the same stage of the supply chain are called:
- (a) Leveraged buyouts
  - (b) Horizontal mergers
  - (c) Vertical mergers
  - (d) Conglomerate mergers
  - (e) None of the above
- 13** Which of the following is considered a bad justification for a merger from the perspective of the companies' shareholders?
- (a) Synergy theory
  - (b) Undervaluation theory
  - (c) Diversification theory
  - (d) Market power theory
  - (e) None of the above
- 14** Altman's Z-score is used to:
- (a) Evaluated the managerial efficiency of a firm
  - (b) Measure of under-pricing in Initial Public Offerings (IPOs)
  - (c) Distinguish between firms that will, and will not, become bankrupt
  - (d) All of the above
  - (e) None of the above
- 15** An decrease in the probability of default increases the:
- (a) promised yield
  - (b) expected yield
  - (c) coupon rate
  - (d) contributions to the PBGC
  - (e) none of the above

**Turn over/...**

## SECTION B

You must answer both questions in this section. Clearly explain all your steps and assumptions.

### Question 1

- (a) Define the following, and identify any data and theoretical problems involved in calculating, or estimating, each of them
- (i) the beta of equity
  - (ii) the risk free rate
  - (iii) the risk premium
  - (iv) the cost of debt
- (12 marks)
- (b) Outline the uses of the weighted average cost of capital (WACC). (4 marks)
- (c) Explain how errors in estimating the variables in part (a) above, would affect the usefulness of the WACC. (4 marks)

### Question 2

Flutey Plc has issued a 6% bond with a face value of £100 maturing in one year. Assume that the risk free interest rate is 6%.

Calculate (a) the promised yield and (b) the expected yield, if

- (i) There is no possibility of default. (6 marks)
  - (ii) There is a 60% chance of default, in which case Flutey Plc will pay the coupon plus 41% of the face value. Assume that, when there is a probability of default, the market price of the bond will be £66.60. (12 marks)
- (c) Explain the differences between the promised yields and expected yields you calculated in parts (i) and (ii) above. (3 marks)
- (d) Why does the market price of this bond change when the probability of default becomes higher than zero? (3 marks)
- (e) If we were to calculate the default adjusted yield, of a bond with a maturity of more than one year, describe what additional factors we would have to incorporate into our calculations. (11 marks)

**End of paper**