Name : ....

Roll No. : ....

Invigilator's Signature : ....

CS/MBA/SEM-3 (FT) & 5 (PT)/FM-302/2012-13

2012

CORPORATE FINANCE

Time Allotted : 3 Hours Full Marks : 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the following :

$10 \times 1 = 10$

i) Agency Costs are incurred when

a) Managers do not attempt to maximize Firm Value

b) Shareholders incur costs to monitor the managers and influence their actions

c) both of (a) and (b)

d) None of (a) and (b).

ii) If a firm takes in more debt, the WACC

a) will increase b) will remain constant

c) will decrease d) cannot be said.

iii) If cost of capital goes up, NPV of a capital expenditure proposal will

a) remain unaffected

b) go Up

c) go down

d) cannot be said.

iv) In capital rationing, ranking of capital expenditure proposals is usually done on the basis of

a) NPV
b) IRR
c) Profitability index
d) None of these.

v) Which of the following is used to incorporate the element of risk in a capital budgeting process ?

a) Risk Adjusted Discounted Rate

b) Decision Tree

c) Certainty Equivalent

d) All of these.

vi) Depreciation on Fixed Assets associated with a Capital Expenditure Proposal, being a non-cash item, does not affect the capital budgeting decisions.

a) True
b) False
c) Partly true
d) Cannot be said.

vii) If the total cash inflow for a capital expenditure proposal is differently distributed over the tenure of the project, will it affect the NPV ?

a) Yes
b) May be
c) No
d) Cannot be said.

viii) If the RADR of three Projects A, B and C are 13%, 19% and 15% respectively, then which of the following is the correct arrangement of the projects in decreasing order of risk ?

a) $A - B - C$ b) $A - C - B$

c) $B - C - A$ d) $C - A - B$.

ix) The capital outlay required for a project is Rs. 1,00,000. Which one of the following will be most beneficial ?

a) Spend Rs. 1,00,000 at the beginning

b) Spend Rs. 50,000 in two half-yearly instalments

c) Spend Rs. 25,000 in four quarterly installments

d) All of these are equally acceptable.

x) In choosing between two capital assets, one with short life span and the other with comparatively longer life and different acquisition costs and running costs, which of the following methods is most suitable ?

a) NPV

b) IRR

c) MIRR

d) Equivalent Annual Costs.

xi) If a project has positive NPV, the profitability index of the same will be

a) greater than one b) equal to one

c) less than one d) equal to zero.

xii) Which of the following evaluation criteria does not consider time value of money ?

a) NPV b) IRR

c) Profitability Index d) Pay-back period.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

2. Write a short note on Agency Problem.

3. What is Risk Adjusted Discount Rate ? Explain its implications in Capital Budgeting Decisions.

4. A person is willing to sell some stock at Rs. 5,00,000, after one year from now. The risk-free rate is 7% and the risk premium is estimated at 8%.

   If the person is intending to enter into a forward contract for sale after one year, calculate the certainty equivalent. Also indicate the amount which compensated for time value of money and the amount of markdown or haircut.

5. The following information relates to ABC Ltd. :

(Amounts in Rs. Crore)

Income Statement		*Assets*	
Sales	650.00	Net Working Capital	75.00
Cost of Goods sold (including depreciation)	325.00	Property, Plant, Equipment & Investments	1,175.00
Selling, General & Administrative Expenses	100.00	Less : Accumulated Depreciation	350
Taxes @ 30%	67.50	Net Investment	825
Net Income	157.50	Other Assets	100
		Total	1,000.00

What will be the value of EVA of *ABC* Limited ? You may assume the cost of capital for the company is 12%.

6. Explain the costs and benefits of Debt Financing.

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

7. The management of Superfast Limited submits the following data to you regarding a Capital Expenditure Proposal :

   The proposal requires a total capital outlay of Rs. 1,00,000 at present, Rs. 1,50,000 after 1 year and Rs. 1,00,000 after two years.

   The cash inflow is estimated as

Year 1	***Probabilities***
Rs. 4,00,000	0·30
Rs. 4,50,000	0·50
Rs. 5,00,000	0·20
Year 2	
Rs. 5,00,000	0·35
Rs. 6,00,000	0·50
Rs. 6,50,000	0·15
Year 3	
Rs. 7,00,000	0·15
Rs. 8,00,000	0·75
Rs. 8,50,000	0·10
Year 4	
Rs. 3,00,000	0·10
Rs. 3,80,000	0·80
Rs. 2,50,000	0·10

   The project is proposed to be financed 80% by loan from SBI at 13% and the balance 20% by the organization's accumulated profits. The cost of equity of Superfast Limited is 20% and the marginal rate of tax applicable to Superfast Limited is 30%.

Advise Superfast Limited regarding the acceptability of the project.

8. Purity Ltd. has developed scientifically more effective water filter than its current model available in the market. One option before the company is to start production on a large scale by installing a large plant costing Rs. 50 lakh. Alternatively, it can initially install a small plant at a cash outlay of Rs. 10 lakh and then decide to expand the capacity after a year at a cost of Rs. 45 lakh if the initial demand is high. There is a 50-50 chance that the initial demand will be high or low. If it is high, then there is a 70% chance that demand in subsequent years will be high. If it turns to be low, it is expected to remain low in the subsequent years also.

The large plant is likely to generate net cash flow of Rs. 10 lakh in year 1 if the demand is high and Rs. 7 lakh if the demand is low. With a high initial demand, net cash flows are expected to be Rs. 16 lakh in perpetuity if the subsequent demand is high and Rs. 10 lakh if the subsequent demand is low. The subsequent demand will remain low if initial demand is low and the expected cash flow in perpetuity will be Rs. 7 lakh. The small plant is estimated to yield net cash flow of Rs. 4 lakh in year 1 if the demand is high and and Rs. 2 lakh if the demand is low. If the initial demand is high, the company will expand its capacity and it is expected to generate net cash flows of Rs. 20 lakh in perpetuity if the subsequent demand is high and Rs. 8 lakh if the subsequent demand is low. If the initial demand is low, the subsequent demand will be low and the expected net cash flow is Rs. 2 lakh in perpetuity.

Suggest making use of Decision Tree Approach what should Purity Ltd. do ?

9. a) Explain the concept of risk and return in respect to valuation of shares. 5

b) A bond has the undernoted features :

Face value = Rs. 1,000

Coupon rate = 11% p.a. payable annually

Tenure = 3 years

Redemption — Bullet, at par

Current market price = Rs. 1,100.

If rate of return expected by the market on a similar security is 10% per annum,.

i) compute its intrinsic value.

ii) is the bond overvalued or undervalued ?

iii) compute its current yield.

iv) set up the equation for VTM of the bond. 10

10. Alpha Corporation plans to acquire Beta Corporation. The following information is available :

	Alpha Corporation	***Beta Corporation***
Total current earning, *E*	Rs. 50 million	Rs. 20 million
Number of outstanding shares, *S*	20 million	10 million
Market price per share, *P*	Rs. 30	Rs. 20

a) What is the maximum exchange ratio acceptable to the shareholders of Alpha Corporation if the PE ratio of the combined entity is 12 and there is no synergy gain ?

b) What is the minimum exchange ratio acceptable to the shareholders of Beta Corporation if the PE ratio of the combined entity is 11 and there is a synergy benefit of 5% ?

c) Assuming that there is no synergy gain, at what level of PE multiple will the lines ER_1 and ER_2 intersect ?

11. a) What are major reasons behind cross border mergers ? 3

b) What do you mean by Conglomerate merger ? How is it different from horizontal and vertical merger ? 6

c) What are the different methods of valuing a company to be acquired ? 6

12. Write short notes on any *three* of the following : 3 × 5

a) Rationale of EVA

b) Benefits of bug-back of shares

c) Spin-offs

d) Divestures

e) Monte-Carlo simulation.