STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086.
(For candidates admitted during the academic year 2015-16)

SUBJECT CODE: 15CM/MC/PF44

B.Com. (A & F) DEGREE EXAMINATION APRIL 2017
ACCOUNTING AND FINANCE
FOURTH SEMESTER

COURSE : MAJOR – CORE
PAPER : PRINCIPLES OF FINANCIAL MANAGEMENT
TIME : 3 HOURS **MAX. MARKS: 100**

Section A

Answer ALL the questions. **(10 x 2 = 20)**

1) Define financial management.
2) What do you understand by time value of money?
3) Give the formula for determining the degree of operating leverage.
4) A firm requires total capital funds of Rs. 50 lakhs all equity. The equity shares can be currently issued at Rs.100 per share. The expected EBIT of the company is Rs. 5, 00,000 with tax rate at 40%. Find out the EPS.
5) What are the components of cost of capital?
6) A company's share is quoted in the market at Rs.20 currently. The company pays a dividend of Re. 1 per share and the investors expect a growth rate of 5% per year. Compute the company's Cost of equity capital.
7) What is Internal Rate of Return?
8) A project has an initial investment of Rs.2, 00,000. It will produce cash inflows after tax of Rs.50, 000 per annum for six years. Compute the payback period for the project.
9) The capital structure of B Ltd. consists of equity share capital of Rs.5,00,000 and 9% debentures of Rs. 2,50,000. Fixed cost is Rs. 50,000. Calculate Financial Leverage when EBIT is Rs. 1,00,000.
10) Abishek Ltd. expects its cost of goods for the next year to be Rs.6,00,000. The expected operating cycle is 60 days. The company's policy is to carry a minimum cash balance of Rs. 2,00,000. Estimate the working capital requirement.

Section B

Answer Any FIVE questions. **(5 x 8 = 40)**

11) Rahave Ltd. is producing articles mostly by manual labour and is considering to replace it by a new machine. There are two alternative models X and Y of the new machine. Prepare a statement of profitability showing the pay-back period from the following information:

	Machine X	Machine Y
Estimated life of the Machine	4 years	5 years
Cost of Machine	Rs. 1,80,000	Rs. 3,60,000
Estimated Savings in Scrap	Rs. 10,000	Rs. 16,000
Estimated Savings in Direct Wages	Rs. 1,20,000	Rs. 1,60,000
Additional Cost of Maintenance	Rs. 16,000	Rs. 20,000
Additional Cost of Supervision	Rs. 24,000	Rs. 36,000

12) a) The capital structure of ABC Ltd. consist of the following securities:

10% Preference Share Capital	Rs. 1,00,00,000
Equity Share Capital (Rs.10/share)	Rs. 1,00,00,000

The amount of operating profit is Rs. 60,00,000. The company is in the 50% tax bracket.

You are required to calculate the financial leverage of the company. What would be the new financial leverage if the operating profit increases to Rs. 90,00,000.

b) From the following information, compute operating leverage of a firm.

Sales	1,20,000 units@Rs. 1.75 per unit.
Variable costs	0.60 paisa per unit.
Fixed cost	Rs. 25,000.

13) Calculate the operating leverage, financial leverage and the combined leverage for the following firms and interpret the results:

	P	Q	R
Outputs (units)	3,00,000	75,000	5,00,000
Fixed cost (Rs.)	3,50,000	7,00,000	75,000
Variable cost per unit (Rs.)	1	7.50	0.10
Interest expenses (Rs.)	25,000	40,000	-
Unit selling price (Rs.)	3	25	0.50

14) Excel Industrial Ltd. has assets of Rs. 1, 60,000 which has been financed with Rs. 52,000 of debt and Rs.90,000 of equity and a general reserve of Rs. 18,000. The firm's total profits after interest and taxes for the year ended 31st March 2007 were Rs.13,500. It pays 8% interest on borrowed funds and is in the 50% tax bracket. It has 900 equity shares of Rs.100 each selling at a market price of Rs.120 per share. Calculate weighted average cost of capital.

15) A firm issues debentures of Rs.1,00,000 and realizes Rs. 98,000 after allowing 2% commission to brokers. Debentures carry interest rate of 10%. The debentures are due for maturity at the end of 10th year at par. Calculate cost of debt.

16) From the following information relating to Perara Ltd., calculate a) Operating cycle b) Number of operating cycles in a year assuming a 360 day year, and c) average working capital required, if annual cash operating expenses are Rs. 150 lakh.

Stock holding: Raw materials	: 2 months
WIP	: 15 days
Finished goods	: 1 month
Average debt collection period	: 2 months
Average payment period	: 45 days

17) From the following information extracted from the books of a manufacturing company, compute the operating cycle in days: Period covered: 365 days

Average period of credit allowed by suppliers: 16 days

Average total of debtors outstanding	4,80,000
Raw materials consumption	44,00,000
Total production cost	1,00,00,000
Total cost of sales	1,05,00,000

…3

Sales for the year	1,60,00,000
Value of Average stock maintained:	
Raw materials	3,20,000
Work-in-progress	3,50,000
Finished goods	2,60,000

Section C

Answer Any TWO questions. **(2 x 20 = 40)**

18) From the following capital structure of a company, compute the overall cost of capital using i) Book value weights and ii) Market value weights

	Book value Rs.	Market value Rs.
Equity share capital (Rs. 10 per share)	45,000	90,000
Retained earnings	15,000	-
Preference share capital	10,000	10,000
Debentures	30,000	30,000

The after tax cost of different sources of finance is as follows:

Equity share capital : 14%
Retained earnings : 13%
Preference share capital : 10%
Debentures : 5%

19) Cost sheet of a company provides the following particulars:

Elements of cost: Raw materials : 40%,
Labour : 10%
Overheads : 30%

The following particulars are also available:

i) Raw materials remain in stock for 6 weeks
ii) Processing time : 4 weeks
iii) Finished goods are in stock for 5 weeks
iv) Period of credit allowed to debtors : 10 weeks
v) Lag in payment of wages : 2 weeks
vi) Period of credit allowed by creditors : 4 weeks
vii) Selling price : Rs.50 per unit
viii) Production in units: 13,000 p.a.

Prepare an estimate of working capital requirement.

20) Anbu Co. Ltd., is considering the purchase of a new machine. Two alternative machines (X and Y) have been suggested each costing Rs. 4, 00,000. Earnings after taxation are expected to be as follows:

Year	Cash inflow	
	Machine X Rs.	Machine Y Rs.
1	40,000	1,20,000
2	1,20,000	1,60,000
3	1,60,000	2,00,000
4	2,00,000	1,20,000
5	1,60,000	80,000

The company has a target rate of return on capital of 10% and on this basis, you are required to compare the profitability of the machines and state which alternative is preferable. The present value of Re. 1 (to be received at the end of each year).

Year	1	2	3	4	5
PV	0.909	0.826	0.751	0.683	0.621

21) A firm has sales of Rs. 60 lakh Its variable cost and fixed cost are Rs. 30 lakh and Rs. 5 lakh respectively. It has a debt of Rs. 30 lakh at 10% and equity of Rs. 50 lakh.

(i) What is the firm's ROI?
(ii) If the firm belongs to an industry, whose assets turnover is 4, does it have a high or low asset leverage?
(iii) What are the operating, financial and combined leverages of the firm?
(vi) If sales drop to Rs. 40 lakh, what will be new EBIT?

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