STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI - 600086. (For candidates admitted during the academic year 2011-12 \& thereafter)

## SUBJECT CODE : 11CM/MC/FM44

## B.Com./B.Com(CS) DEGREE EXAMINATION APRIL 2014 <br> COMMERCE <br> FOURTH SEMESTER

| COURSE | $:$ | MAJOR - CORE |
| :--- | :--- | :--- |
| PAPER | $:$ | FINANCIAL MANAGEMENT |
| TIME | $:$ | 3 HOURS |

SECTION - A

## ANSWER ALL QUESTIONS:

$(10 \times 3=30)$

1. State the importance of financial management.
2. Why has money a time value?
3. Mention any three problems of having excess Working Capital.
4. Explain the three basic concepts of Cost of Capital.
5. What are strategic investment decisions?
6. Calculate the compounded value when Rs. $1,00,000$ is invested for three years and the interest on it is compounded at $10 \%$ p.a. semi-annually.
7. Prepare an estimate of working capital requirements from the following data of a trading concern:
a) Project annual sales 80,000 units
b) Selling price Rs. 8 per unit
c) Percentage of net profit on sales 20
d) Average credit period allowed to customers - 10 weeks
e) Average credit period allowed to suppliers - 8 weeks
f) Average stock holding in terms of sales requirement - 10 weeks
g) Allow $20 \%$ for contingencies
8. A company offers for public subscription equity shares of Rs. 10 each at a premium of $10 \%$. The company pays $5 \%$ of the issue price as underwriting commission. The rate of dividend expected by the equity shareholders is $20 \%$. Compute the cost of Equity.
9. A firm issues debentures of Rs.10, 00,000 and realizes Rs.9, 80,000 after allowing $2 \%$ commission to brokers. The debenture carry an interest of $10 \%$. The debentures are due for maturity at the end of the $10^{\text {th }}$ year. You are required to calculate the effective cost of debt before tax and after tax. The tax rate being 55\%
10. A project costs Rs.20, 00,000 and yields annually a profit of Rs.3, 00,000 after depreciation @ $12.5 \%$ but before tax at $50 \%$. Calculate the pay-back period.

## SECTION - B

## ANSWER ANY FIVE QUESTIONS:

$(5 \times 8=40)$
11. "Investment, financing and dividend decisions are all inter related" - comment.
12. Explain the process for calculating the present value of a sum received after ' $n$ ' years.
13. What is capital budgeting decision? Why is it important for a firm?
14. a) Given the time value of money as $10 \%$ (i.e. the discounting factor) you are required to find out the present value of future cash inflows that will be received over the next four years.

| Year | Cash flows (Rs) |
| :---: | :---: |
| 1 | 1,000 |
| 2 | 2,000 |
| 3 | 3,000 |
| 4 | 4,000 |

b) Find out the present value of an annuity of Rs.3,000 over the three years when discounted at $10 \%$.
15. From the following information taken from the books of a manufacturing concern, compute the operating cycle in days:
Period covered 365 days

Average period of credit allowed by suppliers 16 days
Rs. in 000 's
Average of total debtors outstanding
480
Raw materials consumption 4,400
Total production cost $\quad 10,000$
Total cost of sales 10,500
Sales for the year 16,000
Value of average stock maintained:
Raw materials 320
Work in progress 350
Finished goods 260
16. Your company's share is quoted in the market at Rs. 20 currently. The company pays a dividend of Rs. 2 per share and the investor's market expects a growth rate of $5 \%$ per year. You are required to compute:
(i) The company's equity cost of capital
(ii) If the company's cost of capital is $8 \%$ and the anticipated growth rate is $5 \%$ p.a., dividend of Rs. 2 is to be maintained, calculate the market value of equity share.
17. Bhagawath Electronics Ltd., is planning to introduce Mechanisation to replace the labour force. Two alternatives are available, advise the management to select the machine under pay back period method.

|  |  | Machine X | Machine Y <br> Cost of the machine |
| :--- | :--- | :--- | :--- |
| Estimated life of the machine |  | 50,000 | 40,000 |
| Estimated savings in scrap per year | Rs | 10 years | 8 years |
| Estimated cost of materials p.a. | Rs | 2,000 | 1,000 |
| Maintenance cost p.a. | Rs | 2,500 | 3,000 |
| Additional cost of supervision | Rs | 1,500 | 3,100 |
| Estimated savings in wages | Rs | 10,000 | 2,000 |
| Depreciation is taken on straight line basis. Assume tax rate as $50 \%$ |  |  |  |

## SECTION - C

## ANSWER ANY TWO QUESTIONS:

( $2 \times 15=30$ )
18. From the following information, prepare an estimate of working capital requirements:
(i) Projected annual sales
(ii) Selling price
(iii) Raw material cost
(iv) Direct labour cost
(v) Overheads

52,000 units
Rs. 60 per unit
$40 \%$ of selling price
$30 \%$ of selling price
$20 \%$ of selling price

Raw materials remain in stock on an average for 3 weeks. Goods remain in production process for 4 weeks on an average. 5 weeks are allowed to debtors to pay while firm gets 3 week credit from suppliers. Finished goods remain in stock for one month. Lag in the payment of wages and overhead expenses is 2 weeks. $50 \%$ of the sales are on cash basis. Assume that goods in process are $100 \%$ complete with respect to materials but only $50 \%$ in conversion costs.
19. A limited company has the following capital structure:

Equity share capital $(2,00,000)$ shares
Rs. $40,00,000$
$6 \%$ preference share capital
10, 00,000
$8 \%$ debentures
30, 00,000

$$
\overline{\text { Rs. } 80,00,000}
$$

The market price of the company's equity share is Rs.20. It is expected that company will pay a current dividend of Rs 2 per share which will grow at $7 \%$ for ever. The tax rate may be presumed at $50 \%$. You are required to compute the following:
a) A weighted average cost of capital based on existing capital structure
b) The new weighted average cost of capital if the company raises an additional Rs.20, 00,000 debt by issuing $10 \%$ debentures. This would result in increasing the expected dividend to Rs. 3 and leave the growth rate unchanged but the price of the equity share will fall to Rs. 15 per share.
20. A company can make either of the two investments at the beginning of the year. Using the net present value method, evaluate the profitability of the investments whose details are given below:

Initial investment

| Project 'A' | Project 'B' |
| :---: | :---: |
| Rs | Rs |
| $7,00,000$ | $7,50,000$ |

Projected net income (after depreciation and tax)

| End of year | 1 | $2,25,000$ | $1,62,500$ |
| :---: | :---: | :---: | :---: |
|  | 2 | $2,25,000$ | $1,62,500$ |
|  | 3 | $1,25,000$ | $1,62,500$ |
|  | 4 | 25,000 | $1,62,500$ |

The life of each project is estimated to be 4 years. The cost of finance is $10 \%$ p.a. The P.V. of Re 1 to be received at the end of each year at $10 \%$ p.a. is given below:

| Year | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| P.V. Factor | 0.91 | 0.83 | 0.75 | 0.68 |

Under the profitability index methods what would be your recommendations in the above case.
21. An engineering company is considering the purchase of a new machine for its immediate expansion programme. There are three possible machines suitable for the purpose. Their details are as follows:

|  | Machines (Rs) |  |  |
| :--- | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
| Capital cost | $3,00,000$ | $3,00,000$ | $3,00,000$ |
| Sales (at standard prices) | $5,00,000$ | $4,00,000$ | $4,50,000$ |
| Net cost of production: |  |  |  |
| Direct material | 40,000 | 50,000 | 48,000 |
| Direct labour | 50,000 | 30,000 | 36,000 |
| Factory overheads | 60,000 | 50,000 | 58,000 |
| Administration costs | 20,000 | 10,000 | 15,000 |
| Selling \& distribution costs | 10,000 | 10,000 | 10,000 |

The economic life of the Machine No. 1 is 2 years while it is 3 years for the other two machines. The scrap values are Rs.40, 000, Rs. 25,000 and Rs.30, 000 respectively. Sales are expected to be at the rates shown for each year during the full economic life of the machines. The costs relate to annual expenditure resulting from each machine. Tax to be paid is expected at $50 \%$ of the net earnings of each year. It may be assumed that all payables and receivables will be settled promptly, strictly on cash basis with no outstanding from one accounting year to another. Interest on capital has to be paid at $8 \%$ p.a. You are required to show which machine would be the most profitable investment on the principle of pay-back-method.

