STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI - 600086. (For candidates admitted during the academic year 2019-2020 and thereafter)

SUBJECT CODE:19AF/MC/FM34
B.Com (A\&F) DEGREE EXAMINATION DECEMBER 2020 ACCOUNTING AND FINANCE

## COURSE : MAJOR CORE

PAPER : FINANCIAL MANAGEMENT
TIME : 90 MINUTES
MAX MARKS:50

## Section A

Answer All the Questions

$$
(3 \times 2=6)
$$

1. Define Financial Management.
2. The Market Price of an equity share of Mills Ltd., is Rs 120 . The expected equity dividend is Rs 2.40 per share. The shareholders anticipate a growth of $10 \%$ in dividends. Calculate cost of equity capital.
3. Project K requires an investment of Rs 20 lakhs and yields after tax and depreciation as follows:

| Year | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Profit after <br> tax and <br> depreciation <br> (Rs) | $1,00,000$ | $1,50,000$ | $2,50,000$ | $2,60,000$ | $1,60,000$ |

At the end of $5^{\text {th }}$ year, the plant can be sold for Rs 1,60,000. Calculate Average Rate of Return.

## Section B

Answer Any Three Questions ( $\mathbf{3 \times 8 = 2 4 )}$
4. The following projections have been given in respect of B Ltd.,

Output - 3,00,000 uts
Fixed cost - Rs 3,50,000
Unit Variable cost - Re 1
Interest expense - Rs 25,000
Unit selling price - Rs 3
Calculate (a) Operating leverage (b)Financial leverage (c) Combined leverage
(d) Operating break-even point (e)Financial break-even point
5. (a) A firm borrows Rs $10,00,000$ at an interest rate of $15 \%$ and the loan is to be repaid in 5 equal instalments at the end of each year. Prepare amortization schedule.
(b) The expected cash inflows are as follows:

| Year | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Cash <br> inflow(Rs) | 3000 | 4500 | 6000 | 8000 | 10,000 |

Discount rate is $16 \%$. Find out the present value of cash inflows using the following P.V factors
I -0.862, II -0.743, III -0.641, IV -0.552, V -0.476
6. From the following information calculate operating cycle of a company.

Raw materials consumption per annum - Rs 8,42,000
Annual cost of production - Rs 14,25,000
Annual cost of sales- Rs $15,30,000$
Annual sales - Rs 19,50,000
Average value of current assets held:
Raw materials - Rs 2,24,000
Work -in -progress - Rs 1,54,000
Finished goods - Rs 2,44,000
Debtors - Rs 5,20,000.
The company gets 30 days credit from its suppliers. All sales made by the firm are on credit only. Assume one year as equal to 365 days.
7. It is proposed to introduce a new machine to increase the production capacity of department X. Two machines are available, Type 'A' and Type 'B'. The following information is available.

| Particulars | Type A <br> $(\mathrm{Rs})$ | Type B <br> $(\mathrm{Rs})$ |
| :--- | :---: | :---: |
| Cost of Machine | $3,50,000$ | $6,30,000$ |
| Estimated life(in yrs) | 7 | 10 |
| Estimated savings in scrap <br> p.a | 20,000 | 32,000 |
| Additional cost of Indirect <br> materials per annum | 10,000 | 16,000 |
| Estimated savings in wages | 15 | 20 |
| Employees not required | 10,000 | 16,000 |
| Wages per employee per <br> annum | 7,200 | 12,000 |
| Additional cost of <br> maintenance per annum | 24,000 | 36,000 |
| Additional cost of <br> supervision per annum |  |  |

The rate of taxation can be regarded as $50 \%$ of profits. Which machine can be recommended for purchase?

## Section C

Answer Any One Question
8. Suriya Ltd., has the following capital structure:

4000 Equity shares of Rs 100 each -
10\% Preference shares
$11 \%$ Debentures

Rs 4,00,000
Rs 1,00,000
Rs 5,00,000
The current market price of the share is Rs 102. The company is expected to declare a dividend of Rs 10 at the end of the current year, with an expected growth rate of $10 \%$. The applicable tax rate is $50 \%$.
(a) Find out the cost of equity capital and Weighted Average Cost of Capital
(b) Assuming that the company can raise Rs $3,00,00012 \%$ debentures, find out the new

Weighted Average Cost of Capital if
(i) dividend rate is increased from $10 \%$ to $12 \%$
(ii)Growth rate is reduced from $10 \%$ to $8 \%$ and
(c)Market price is reduced to Rs 98 .
9. X Ltd., is considering investing in a project requiring a capital outlay of Rs $8,00,000$. The annual net income after depreciation but before taxes are as follows:

| Year | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Profit(Rs) | $4,00,000$ | $4,00,000$ | $3,20,000$ | $3,20,000$ | $1,60,000$ |

Depreciation may be taken as $20 \%$ on original cost and taxation at $50 \%$ of net income.
Evaluate the project according to each of the following methods
(a) Payback Method
(b) Rate of return on original investment method
(c) Rate of return on average investment method
(d) NPV taking cost of capital @ $10 \%$
(e) Profitability Index Method
(f) Internal Rate of return method.

Discount factor @ $10 \%$ from years 1 to 5 are as follows
Year $1-0.909$, Year $2-0.826$, Year $3-0.751$, Year $4-0.683$, Year $5-0.621$

