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

SUBJECT CODE: 11CM/AC/PF24
B.C.A. DEGREE EXAMINATION APRIL 2015

SECOND SEMESTER

| COURSE | $:$ | ALLIED - CORE |
| :--- | :--- | :--- |
| PAPER | $:$ | PRINCIPLES OF FINANCIAL MANAGEMENT |
| TIME | $:$ | 3 HOURS |

## SECTION - A

I. ANSWER ALL THE QUESTIONS
( $10 \times 2=20$ )

1. State the features of Capital Budgeting.
2. What is Operating Cycle?
3. Give short note on Cash Turnover.
4. What is value maximization?
5. Explain the position of Finance Manager.
6. Write a note on Present value of perpetuity.
7. Give the meaning of Profitability Index.
8. Write the sources of Working Capital.
9. Write a short note on effective rate of interest.
10. What are the objectives of Cash Management?

## SECTION - B

II. ANSWER ANY FIVE QUESTIONS
( $5 \times 8=40$ )
11. a) Ms. Anitha invests Rs. 50,000 in a bank at $10 \%$ for 5 years. Calculate the maturity value if interest is compounded annually.
b) The expected cash inflows are as follows:

| Year | 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Cash inflow (Rs.) | 3,000 | 4,500 | 6,000 | 8,000 | 10,000 |

Discount rate is $16 \%$. Find out the present value of cash inflows using P.V. table.
12. The following forecasts are provided in respect of XYZ Ltd., for the year 2014:

| Sales | Rs. 14, 00,000 |
| :--- | :--- |
| Purchases | Rs. $9,50,000$ |
| Cost of goods sold | Rs. $9,65,000$ |
| Average debtors | Rs. $2,00,000$ |
| Average creditors | Rs. $1,30,000$ |
| Average stock | Rs. $2,02,000$ |

Find out the cash operating cycle given that all sales and purchases are made on credit.
13. A project requires an investment of Rs. $5,00,000$ and has a scrap value of Rs.20, 000 after 5 years. It is expected to yield profits after taxes and depreciation during the five years amounting to Rs.40, 000, Rs.60, 000, Rs.70, 000, Rs.50, 000 and Rs.20, 000. Calculate a) Average rate of return on original investment b) Average rate of return on average investment.
14. SRCC Ltd., is engaged in large scale customer retailing. From the following information, you are required to forecast its working capital requirements for the year 2011-2012.
Projected annual sales
Percentage of net profit on cost sales
Average credit allowed to debtors
Rs. 65 lakh

Average credit allowed by creditors
10 weeks
4 weeks
Average stock carrying (in terms of sales requirements) 8 weeks
Add $10 \%$ to computed figures to allow for contingencies.
15. Prepare Cash budget for the month of March 2013 from the following information:
Cash in hand (estimated) on March 1, 2013
Rs. 20,000
Sales - February, 2013
Rs. 50,000
March, 2013
Rs. 80,000
$80 \%$ amount is recovered in the month of sale and the balance is received in the subsequent month. Purchases for the month of February, 2013 and March, 2013 are estimated to be Rs. 20,000 and Rs. 30,000 respectively. No credit period is allowed by suppliers. A sale commission of $5 \%$ is paid in cash in the month of sale itself.
16. From the following information relating to ABC Ltd., Calculate (a) Operating cycle, (b) No. of operating cycles in a year assuming a 360 day year, and (c) Average working capital required, if annual Cash operating expenses are Rs. 90 lakh.
Stock holding: Raw materials : 3 months
Work-in-Progress : 15 days
Finished goods : 1 month
Average debt collection period : 1 month
Average payment period : 45 days
17. X Ltd. is considering two different investment proposals, A and B. the details are as under:

|  | Proposal A | Proposal B |
| :---: | :---: | :---: |
| Rs. | Rs. |  |
| Investment cost | $1,90,000$ | $4,00,000$ |

CFAT (cash inflows before dep. and after tax)

| year 1 | 80,000 | $1,60,000$ |
| :--- | :--- | :--- |
| year 2 | 80,000 | $1,60,000$ |
| year 3 | 90,000 | $2,40,000$ |

Suggest the most attractive proposal on the basis of NPV method considering that the future incomes are discounted at $12 \%$.

## SECTION - C

III. ANSWER ANY TWO QUESTIONS
( $\mathbf{2} \times 20=40$ )
18. Prepare monthly cash budget for six months beginning April, 2014 on the basic of the following information.
i) Estimated monthly sales are as follows:

| Rs. |  | Rs. |  |  |
| :--- | :--- | :--- | :--- | :--- |
| January | $1,00,000$ |  | June | 80,000 |
| February | $1,20,000$ |  | July | $1,00,000$ |
| March | $1,40,000$ |  | August | 80,000 |
| April | 80,000 |  | September | 60,000 |
| May | 60,000 |  | October | $1,00,000$ |

ii) Wages and Salaries are estimated to be payable as follows:

| Rs. | Rs. |  |  |  |
| :--- | ---: | :--- | :--- | :--- |
| April | 9,000 |  | July 10,000 |  |
| May | 8,000 |  | August | 9,000 |
| June 10,000 |  | September | 9,000 |  |

iii) Of the sales, $50 \%$ are on credit and $50 \%$ for cash. The credit sales are collected within one month.
iv) Purchases amount to $80 \%$ of sales and are paid with 1 month credit.
v) The firm is to make an advance payment of tax of Rs.5, 000 in July 2014.
vi) The firm had a cash balance of Rs.20, 000 on April 1, 2014.
19. X Company is considering two mutually exclusive projects. Both require an initial cash outlay of Rs.1, 00,000 each and have life of 5 years. The cost of capital is $10 \%$ and tax rate is $50 \%$. The project will be depreciated on a Straight Line Method. The cash inflow before depreciation expected from the projects are asfollows:

Projects

|  | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | 60,000 | 60,000 | 60,000 | 60,000 | 60,000 |
| $\mathbf{2}$ | 80,000 | 50,000 | 40,000 | 70,000 | 70,000 |

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Ascertain the proposal to be accepted on the basis of NPV and Pay back period methods.
20. You are supplied with the following information calculate the amount of working capital required.
Production for the year 69,000 units
Finished goods in store $\quad 3$ months
Raw material in store 2 months
Production process 1 month
Credit allowed by creditors 2 months
Credit given to debtors 3 months
Selling price per unit Rs. 50/-
Raw material $\quad 50 \%$ of selling price
Direct wages $\quad 10 \%$ of selling price
Manufacturing and administrative Overheads $16 \%$ of selling price
Selling overheads $\quad 4 \%$ of selling price
Materials are introduced at the beginning of the production cycle. Wages and overhead accrue evenly. Lag in payment of wages is 1 month.
21. a. A is about to retire. His company has given him two options:
i. A lump sum of Rs.20, 000
ii. An annuity of Rs.2, 500 for 10 years.

Which is the better option for A, if an interest rate of $6 \%$ is used for the annuity?
b. A machine costs Rs.3, 00,000 and its effective life is estimated to be 6 years. A sinking fund is created for replacing the machine at the end of its effective lifetime when its scrap realizes a sum of Rs. 20,000 . Calculate the amount which should be provided every year if the interest at $8 \%$ is compounded annually.
c. A bond with a face value of Rs. 5,000 matures at the end of 5 years, the rate of interest on the bond being $15 \%$ p.a. paid annually. Find the present value of the bond.

