# STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI - 600086. <br> (For candidates admitted during the academic year 2015-2016 and thereafter) 

SUBJECT CODE: 15CM/AC/PF35

## B.A DEGREE EXAMINATION NOVEMBER 2018 <br> BRANCH IV - ECONOMICS <br> THIRD SEMESTER

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

## ANSWER ALL QUESTIONS:

$(10 \times 2=20)$

1. Define the term financial management.
2. What is Capital Budget?
3. What is time value of money?
4. Banu has deposited Rs.50,000 in IOB. Interest is compounded at $6 \%$ p.a. for 3 years. Compute the amount of maturity.
5. What is working capital?
6. Calculate Operating cycle from the following data:

Stock holding: Raw materials :2 months
W.I.P : 15 days

Finished goods : 1 month
Average debt collection : 2 months
Average payment period : 45 days
7. Give the meaning of cash.
8. Ascertain cash paid in June 2018:

Purchases:

$$
\begin{array}{ll}
\text { April } & \text { Rs. } 60,000 \\
\text { May } & \text { Rs. } 75,000 \\
\text { June } & \text { Rs. } 50,000
\end{array}
$$

Credit terms: purchases are $50 \%$ on cash basis and the balance payable after a lag of Two months.
9. A project cost Rs. $2,50,000$ and yields an annual cash inflow of Rs. 50,000 for 7 years. Calculate its pay - back period.
10. Calculate optimum cash balance under Baumol model

Annual cash requirement Rs $1,50,000$;
Fixed cost per transaction Rs 15
Interest on securities 18\%

## SECTION - B

## ANSWER ANY FIVE QUESTIONS:

11. Explain the objectives of financial management.
12. a) Calculate the present value of Rs. $2,00,000$ to be received after 7 years at $10 \%$ compounded annually.
b) A project costs Rs. 15,60,000 and yields annually a profit of Rs.2,70,400 after depreciation of $12 \%$ p.a but before tax at $25 \%$.
Calculate pay - back period.
13. Victory Ltd. is engaged in customer retailing. You are required to estimate its working capital requirements from the following data:
Projected annual sales

- Rs.6,50,000
Percentage of the Net profit to cost of sales
- 25\%
Average credit allowed to debtors
- 10 weeks
Average credit allowed by creditors
- 4 weeks
Average stock carrying
- 8 weeks.

Allow 20\% for Contingencies.
14. A ltd has an annual cash outflow of Rs 1 lakh arising uniformly during the year. It plans to meet these demands for cash by periodically selling its marketable securities. Firms marketable securities are invested to earn 5\%. Transaction cost for converting investments is Rs 100.
a. Use Baumol model to find out the optimal transaction size for transfer from marketable securities to cash
b. What will be the company's average cash balance
c. How many transfers per year will be required
d. What is the time interval between two transfers
e. What will be total transaction cost and interest cost during the year?
15. The initial cash outlay of a project is Rs. 60,000

Estimated cash inflows:

| $1^{\text {st }}$ year | Rs. 25,000 |
| :--- | :--- |
| $2^{\text {nd }}$ year | Rs. 30,000 |
| $3^{\text {rd }}$ year | Rs. 20,000 |
| $4^{\text {th }}$ year | Rs. 15,000 |

Compute Net Present Value and profitability index taking the cut off rate as $10 \%$.
The cost of the capital is $10 \%$. Present value is Year:
$\begin{array}{lcccc} & & 1 & 2 & 3 \\ \text { P.V.factor @ } 10 \% & 0.909 & 0.826 & 0.751 & 0.683\end{array}$
16. What are the motives of holding cash?
17. From the following forecasts of cash flows prepare a cash budget of XYZ Ltd. for the year 2008.

Opening balance of cash on 1.1.2008
Rs.
Cash sales 5,000

Receipts from debtors 25,000

Cash purchases 40,000

Payment to creditors $\quad 18,000$ 15,000

Payment of operating expenses $\quad 7,000$
Income from Dividend

## SECTION - C

ANSWER ANY TWO QUESTIONS:
$(2 \times 20=40)$
18. Find out average amount of working capital requirement.

Amount locked up in stock:
Stock of finished goods Rs.10,000
Stock of material Rs. 8,000
Average credit given:
Local sales (2 weeks credit) Rs.1,04,000
Outside state sales ( 6 weeks credit)
Rs.3,12,000
Time available for payments:
For purchase ( 4 weeks)
Rs.78,000
For wages (2 weeks)
Rs.2,60,000
Add $10 \%$ to allow for contingencies.
19. A choice to be made between two projects which requires an equal investment of Rs. 50,000 and are expected to generate net cash flows as under:

| Particulars | Project I <br> Rs. | Project II <br> Rs. |
| :--- | ---: | ---: |
| End of year 1 | 25,000 | 10,000 |
| End of year 2 | 15,000 | 12,000 |
| End of year 3 | 10,000 | 18,000 |
| End of year 4 | NIL | 25,000 |
| End of year 5 | 12,000 | 8,000 |
| End of year 6 | 6,000 | 4,000 |

The cost of the capital is $10 \%$. Present value is Year:
$\begin{array}{lllllll}1 & 2 & 3 & 4 & 5 & 6\end{array}$
$\begin{array}{lllllll}\text { P.V.factor @ } 10 \% . & 0.909 & 0.826 & 0.751 & 0.683 & 0.621 & 0.564\end{array}$
You are required to evaluate the project according to each of the following methods:
(a) Payback period.
(b) NPV method taking cost of capital as $10 \%$.
20. XYZ company wishes to arrange O.D. facilities with its bankers during the period April June, when it will be manufacturing mostly for stock.
i. Prepare cash budget for the above period from the following data.

| Months | Sales <br> Rs. | Purchases <br> Rs. | Wages <br> Rs. |
| :--- | :---: | :---: | :---: |
| February | $1,80,000$ | $1,24,000$ | 12,000 |
| March | $1,92,000$ | $1.44,000$ | 14,000 |
| April | $1,08,000$ | $2,43,000$ | 11,000 |
| May | $1,74,000$ | $2,46,000$ | 10,000 |
| June | $1,26,000$ | $2,68,000$ | 15,000 |

ii. $50 \%$ of credit sales is realized in the month following the sale and the other $50 \%$ in the second month following. Creditors are paid in the month following the month of purchase.
iii. Wages are paid at the end of the respective month
iv. Cash at bank - $1^{\text {st }}$ April - Rs.25,000.
21. a. Anitha has deposited Rs. $1,50,000$ in a fixed deposit for 6 years at $6 \%$ compound rate of interest. How much can she withdraw each years to have no balance in the account at the end of $6^{\text {th }}$ year? You may use compound value table.
b. Briefly explain the determinants of working capital requirements.

