STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086.
(For candidates admitted during the academic year 2015 – 2016 and thereafter)

SUBJECT CODE: 15CM/AC/PF35

B.A DEGREE EXAMINATION NOVEMBER 2017
BRANCH IV – ECONOMICS
THIRD SEMESTER

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

SECTION – A

ANSWER ALL QUESTIONS: **(10 x 2 = 20)**

1. What is financial management?
2. State the significance of operating cycle in determining working capital.
3. Mention the motives of holding cash.
4. What is an annuity?
5. State the techniques of capital budgeting?
6. A project costs Rs. 20,00,000 and yields annually a profit of Rs. 3,00,000 after depreciation @12.5% (straight line method) but before tax 50%. Compute pay back period.
7. If a person deposits Rs. 10,000 today in bank which pays 10% interest compounded annually, how much will the deposit grow to after 7 years and 12 years.
8. A finance company advertises that it will pay a lump sum of Rs.89,300 at the end of five years to investors who deposit annually Rs.12,000 for 5 years. What is the interest implicit in this offer?
9. Compute the average rate of return of a Machine, when its cost is Rs.56,125 and its annual estimated income after depreciation and income tax for five years are Rs. 3,375, Rs. 5,375, Rs.7,375, Rs. 9,375 and Rs.11,375 respectively. Estimated life of the machine is 5years and estimated salvage value is Rs.3,000.

10. From the following data ascertain, whether the firm has surplus or deficiency of cash

Particulars	Normal period	Peak period
Desired days of cash	6	4
Average daily outflows	Rs. 30,000	Rs.50,000
Actual cash balance	Rs. 1,00,000	Rs.1,20,000

SECTION – B

ANSWER ANY FIVE QUESTIONS: **(5 x 8 = 40)**

11. Explicate the objectives of financial management.
12. Elucidate the scope of financial management.
13. The following information is available in respect of a trading firm:
    (i) On an average, debtors are collected after 45 days; inventories have an average holding period of 75 days and creditors payment period on an average is 30 days.

(ii) The firm spends a total of Rs.1,20,00,000 annually at a constant rate.
(iii) It can earn 10% on investments.
From the above information, compute; (a) the cash cycle and cash turnover, (b) minimum amounts of cash to be maintained to meet payments as they become due, (c) savings by reducing the average inventory holding period by 30 days.

14. To finance your PG studies in an evening college, you undertake a part time job for 5 years. Your employer fixes an annual salary of Rs.1,000 at the end with a provision that you get annual increment at the rate of 10%. Compute the present value of salary. If your required rate of return is return is 12%. What will be your present value of salary?

15. 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	Rs. 4,80,000
Raw materials consumption	Rs.44,00,000
Total production cost	Rs.1,00,00,000
Total cost of sales	Rs. 1,05,00,000
Sales	Rs. 1,60,00,000
Value of average stock of raw material maintained	Rs. 3,20,000
Value of average stock of work-in-progress maintained	Rs. 3,50,000
Value of average stock of finished goods maintained	Rs. 2,60,000

16. XYZ Ltd. is considering investing in a project that costs Rs. 5,00,000. The estimated salvage value is Zero; tax rate is 35%. The company uses straight line depreciation for tax purposes and the proposed project has cash flows before tax (CFBT) as follows:

Year	1	2	3	4	5
CFBT	Rs. 1,00,000	Rs. 1,00,000	Rs. 1,50,000	Rs. 1,50,000	Rs. 2,50,000

Determine (i) Pay back period and (ii) Average rate of return.

17. What is the present value of the following cash stream if the discount rate is 14%?

Year	0	1	2	3	4
Cash flow	Rs.5,000	Rs.6,000	Rs.8,000	Rs.9,000	Rs.8,000

SECTION – C

ANSWER ANY TWO QUESTIONS: (2 x 20 = 40)

18. A company is contemplating to purchase a machine. Two machines A and B are available, each costing Rs. 5 lakhs. In comparing the profitability of the machines, a discounting rate of 10% is to be used and machine is to be written off in five years by straight line method of depreciation with nil residual value. Cash flows after tax are expected as follows:

Year	Machine A	Machine B
1	Rs.1,50,000	Rs.50,000
2	Rs.2,00,000	Rs.1,50,000
3	Rs.2,50,000	Rs.2,00,000
4	Rs.1,50,000	Rs.3,00,000
5	Rs.1,00,000	Rs.2,00,000

You are required to evaluate the machine according to the following methods:

(i) Payback period method.

(ii) Rate of return on average investment method

(iii) Net present value method

(iv) Profitability index method.

19. The cost sheet of PQR Ltd. provides the following data:

Particulars	Rs. (per unit)
Raw material	50
Direct labour	20
Overheads (including depreciation of Rs.10)	40
Total cost	110
Profit	20
Selling price	130

Raw materials are held in stock on an average for one month. Materials are in process on an average for half-a- month. Finished goods lie in warehouse for one month.
Credit allowed by suppliers is one month and credit allowed to debtors is one month.
Time lag in payment of wages is 10 days. Time lag in payment of overhead expenses is 30 days. 25% of the sales are on cash basis.
Cash in hand and at the bank is expected to be Rs.1,00,000 and the expected level of production amounts to 54,000 units. You may assume that production is carried on evenly throughout the year. Prepare statement showing the working capital requirement.

20. From the following budgeted data, forecast the cash position at the end of April, May and June2013.

Month	Sales (Rs.)	Purchases (Rs.)	Wages (Rs.)	Miscellaneous (Rs.)
February	1,20,000	84,000	10,000	7,000
March	1,30,000	1,00,000	12,000	8,000
April	80,000	1,04,000	8,000	6,000
May	1,16,000	1,06,000	10,000	12,000
June	88,000	80,000	8,000	6,000

Additional information:
Sales: 20% realized in the month of sales, discount allowed 2%. Balance realized equally in two subsequent months.
Purchases: These are paid in the month following the month of supply.
Wages: 25% paid in arrears following month.
Miscellaneous expenses: Paid a month in arrears.
Rent: Rs.1, 000 per month paid quarterly in advance due in April.
Income tax: First instalment of advance tax Rs.25,000 due on or before 15th June.
Income from investments: Rs.5, 000 received quarterly, in April, July etc.
Cash in hand: Rs. 5,000 on 1st April, 2013.

21. A plastic manufacturing Co. is considering replacing an older machine, which was fully depreciated for tax purpose with a new machine costing Rs.40, 000. The new machine will be depreciated over its 8 years of life. It is estimated that the new machine will reduce labour cost by 8000 p.a. The management believes that there will be no change in other expenses and revenues of the firm due to the machine. The Co. requires an after tax return on investment of 10%. Its rate of tax is 35%. The Co.'s income statement for current year is given for other information.

Income Statement for the current year

Sales		5,00,000
Costs :- Material	1,50,000	
Labour	2,00,000	
Factory & Administrative expenses	40,000	
Depreciation	40,000	4,30,000
Net income before tax		**70,000**
Tax		24,500
Earnings After Tax		**45,500**

Should the company buy the new machine? You may assume the Co. follows Straight Line Method of depreciation and the same is allowed for tax purpose.

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