

B.Com. (A & F) DEGREE EXAMINATION APRIL 2019  
ACCOUNTING AND FINANCE  
FOURTH SEMESTER

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

Section A

Answer ALL the questions. (10 x 2 = 20)

1. What do you understand by time value of money?
2. Raj makes an initial deposits of Rs.2,00,000 in Laxmi Bank Ltd. interest is compounded at 10% p.a. for 6 years. Compute the amount of maturity.
3. What do you understand by financial leverage?
4. Find the operating leverage from the following data:  
Sales Rs.50,000.  
Variable cost 60%  
Fixed cost Rs.12,000
5. What is cost of capital?
6. The equity of Mercury Ltd. is traded in the market at Rs.90 each. The expected current year dividend per share is Rs.18. the subsequent growth in dividends is expected at the rate of 6%. Calculate the cost of equity capital.
7. Write a short note on IRR method.
8. 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.
9. What is working capital?
10. 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

Section B

Answer Any FIVE questions. (5 x 8 = 40)

11. X Ltd. is considering investing in a project requiring a capital outlay of Rs.8,00,000. Forecast for annual net incomes after depreciation but before tax 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. You are required to evaluate the project according to each of the following methods:  
(a) Rate of return on original investment method: (b) Rate of return on average investment method: (c) Internal rate of return method.

12. A firm has sales of Rs. 20,00,000 variable cost of Rs. 14, 00,000 and fixed cost of Rs. 4, 00,000. It has a debt of Rs. 10, 00,000 at 10% rate of interest. Find out the leverages.

13. Calculate the cost of capital in the following cases:

- (i) X Ltd. issues 12% debentures of face value Rs. 100 each and realizes Rs.95 per debenture. The debentures are redeemable after 10 years at a premium of 10%.  
 (ii) Y Ltd. issues preference shares of face value Rs. 100 each carrying 14% dividend and he realizes Rs. 92 per share. The shares are repayable after 12 years at par.

**Note: Both companies are paying income tax at 50%.**

14. Project 'M' initially costs Rs.50, 000. It generates the following cash flows:

Year	Cash inflow Rs.	Present value of Re.1 at 10%
1	18,000	0.909
2	16,000	0.826
3	14,000	0.751
4	12,000	0.683
5	10,000	0.621

Taking the cut – off rate as 10%, suggest whether the project should be accepted or not.

15. 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 on cost of sales	- 25%
Average credit allowed to debtors	- 10 weeks
Average credit allowed by creditors	- 4 weeks
Average stock carrying (in terms of sales requirements)	- 8 weeks.
Allow 20% for Contingencies.	

16. Find the financial leverage from the following data:

Net worth	Rs.25,00,000
Debt / Equity	3/1
Interest rate	12%
Operating profit	Rs.20,00,000

17. A. Calculate the maturity amount if Rs.2,00,000 is invested for 2 years at 12% compounded – (a) annually, (b) semi-annually (c) quarterly and (d) monthly.

B. Exactly ten years from now Shyam will start receiving a pension of Rs.3,000 a year. The payment will continue for sixteen years, how much is the pension worth now, if Shyam's time preference rate of 10 percent?

### Section C

**Answer Any TWO questions.**

**(2 x 20 = 40)**

18. A. Prepare an amortization table for a loan amount of Rs.5,000 at an interest rate of 10% to be repayable in 5 years.

B. Baby's father wants to give her Rs.2,50,000 on her 24<sup>th</sup> birthday. Today is her 14<sup>th</sup> birthday. He wants to know two things:

- (i) How much annual payment is to be made by him into a fund?, and  
 (ii) Alternatively how much is to be invested in the fund in lumpsum?

The fund earns an interest of 8% which is compounded annually. You may use compound value table

C. A company has issued debentures of Rs. 40 lakh to be repaid after 7 years. How much should the company invest in a sinking fund earning 12% in order to be able to repay debentures?

D. Z Ltd., intend to invest Rs. 15,000 per annum at the end of years 5,6,7 and 8 at an annual interest rate of 12%. Find out the present value of the deferred annuity payments.

19. From the following capital structure of a company, compute the overall cost of capital using (i) Book value weights, and (ii) Market value weights.

Particulars	Book Value Rs.	Market Value Rs.
Equity share capital (Rs. 10 per share)	45,000	90,000
Retained earnings	15,000	-
Preference share capital	10,000	10,000
Debentures	30,000	30,000

The after tax cost of different sources of finance is as follows:

Equity share capital	: 14%
Retained earnings	: 13%
Preference share capital	: 10%
Debentures	: 5%

20. 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 Rs.	Project II 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:

	1	2	3	4	5	6
P.V.factor @ 10%.	0.909	0.826	0.751	0.683	0.621	0.564

You are required to evaluate the project according to each of the following methods:

- Payback period.
- NPV method taking cost of capital as 10%.

21. Cost sheet of a company provides the following particulars:

Elements of cost

Raw materials	: 40%
Labour	: 10%
Overheads	: 30%

The following particulars are also available:

- Raw materials remain in stock for 6 weeks
- Processing time 4 weeks
- Finished goods are in stock for 5 weeks
- Period of credit allowed to debtors 10 weeks
- Lag in payment of wages 2 weeks
- Period of credit allowed by creditors 4 weeks
- Selling price Rs. 50 per unit
- Production in units 13,000 p.a

Prepare an estimate of working capital.

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