

ACC501 – Business Finance
Practice (Numerical) Questions
(Lesson # 1 – 18)

IMPORTANT INSTRUCTIONS:

Dear Students,

It is advised to read the following **instructions** carefully before attempting the numerical practice questions provided in this document:

- You are required to solve/attempt all the questions **on your own**. **DO NOT** send the solution of any question to the teacher via MDB, Ticket or Email because the **solution file** will also be uploaded in a few days. *(Any query relevant to these questions will be addressed in the upcoming interactive live session of the course.)*
- You must consult the relevant lesson before attempting any question. In case you have any problem while attempting the question, you may note it down for the discussion in the upcoming interactive live session. **DO NOT** send any questions through MDB, Ticket or Email.
- Once the solution file is uploaded, you may compare your attempts with the actual solution of the questions.
- The questions provided in this file are solely for the practice purpose. If you try to attempt/solve these questions with due attention, you may be able to attempt the numerical questions in exam as well.
- For practicing MCQs, you are advised to attempt the ‘Formative Assessment Quizzes’ available in the “Reading” tab of Lessons # 3, 6, 10, 11, 14, 15, 17 and 19.
- As far as theoretical questions are concerned, you are advised to watch video lectures carefully and consult the handouts along with recommended book(s).

Good Luck,
Instructor ACC501

Practice (Numerical) Questions

(Lesson # 1 – 18)

1. The following data is available for ZT Corporation for the year ended 31 December 2023. You are required to prepare the Balance Sheet of this corporation:

- Short-term debt of Rs. 40,000
- Long-term debt of Rs. 500,000
- Current assets of Rs. 240,000
- Net fixed assets of Rs. 650,000

2. Calculate the Shareholder's Equity of the ZT Company, if the company has:

Items	Rs. (in millions)
Cash and equivalents	425
Accounts payable	290
Notes payable	287
Inventories	329
Property, plant, & equipment	1470
Long term debts	578

3. Ali Corporation has a taxable income of Rs. 85,000. What will be the Total Tax for this Corporation? Use the following schedule for tax calculations.

<u>Taxable Income</u>	<u>Tax Rate (%)</u>
Rs. 0 - 50,000	15
50,001 - 75,000	25
75,001 - 100,000	34
100,001 - 335,000	39

4. From the following information of Alfa Corporation, calculate the "Operating Cash Flow":

Particulars	Rs.
Sales	13,500
Cost of Goods Sold	6,400
Depreciation	12,00
Interest Expense	680
Tax	150

5. What would be the Net Capital Spending if Alfa Corporation had fixed assets of Rs. 100,000 at the start of the accounting year whereas at the end of the same accounting period, the value of these assets is Rs. 150,000 while the depreciation is of Rs. 20,000 as per the yearly income statement.
6. You are required to calculate Cash Flow to the Creditors and Cash Flow to the Stockholders from the following financial data:

Cash Flows	Rs. ('000)
Operating cash flow	330
Capital spending	150
Additions to net working capital	25

Interest paid	45
Retirement of debt	116
Proceeds from new debt sales	76
Dividends paid	52
Repurchase of Stock	12
Proceeds from new stock issue	45

7. From the given information of Alfa Corporation, you are required to calculate the Cash Flow from the firm's assets and the Cash Flow to the investors:

Cash Flows	Rs. ('000)
Operating cash flow	325
Debt	95
Capital spending	179
Equity	27
Additions to net working capital	32

8. From the given information, prepare the Cash Flow Statement of Alfa Corporation by estimating cash flows from operations, investments, and financing:

Cash flows	Rs. (in '000)
Net Income	8,500
Acquisition of fixed assets	19,700
Proceeds from long-term debt sales	8,500
Dividends Paid	4,200
Sales of fixed assets	2,400
Increase in accounts receivable	2,300

9. From the following data pertaining to XYZ Corporation, you are required to calculate the **Current Ratio** along with complete calculations:

Items	Rs.
Cash	450,000
Accounts receivable	525,000
Accounts payable	830,000
Land and Machinery	620,000
Inventory	310,000
Notes payable	120,000

10. The following data represents the assets side of a corporation. You are required to convert this data into a common size (standardized) statement.

Particulars	Rs. (Million)
Current Assets	
Cash	92
Receivables	178
Inventories	390
Total Current Assets	660
Fixed Assets	
Plant and Machinery	2820
Total Assets	3480

11. From the following data of a company, calculate the Current Ratio and Quick Ratio:

Items	Rs.
Net profit	42,500
Cost of goods sold	365,000
Sales	525,000
Cash	63,000
Accounts payable	162,000
Accounts receivable	173,000
Net fixed assets	752,000
Inventory	87,000
Accruals	145,000
Bank loan and short-term loan	63,000
Common stock	165,000
Long term debt	425,000
Retained earnings	145,000

12. You are required to calculate “Receivables Turnover” and “Average Collection Period” from the given data:

Items	Rs. ('000)
Accounts receivable	1,850
Inventory	6,550
Accounts payable	1,700
Sales	13,500
Net profit	3,500

13. From the following information, you are required to calculate the Total Debt Ratio

Items	Rs.
Current Assets	500,000
Land	200,000
Building	100,000
Machinery	400,000
Total Equity	1,000,000

14. From the given information of Alfa Corporation, calculate its Debt Ratio, Equity Ratio and Debt-to-Equity (D/E) Ratio:

Items	Rs.
Cash	25,000
Accounts receivable	160,000
Inventory	50,000
Net fixed assets	640,000
Accounts payable	84,000
Accruals	110,000
Bank loan and short-term loan	64,000
Long term debt	260,000

Common stock	140,000
Retained earnings	130,000
Sales	430,000
Cost of goods sold	220,000
Net profit	32,000

15. From the given information calculate the following ratios of Alfa Corporation.

- Interest Coverage Ratio
- Cash Coverage Ratio
- Inventory turnover Ratio
- Day's sales in Inventory
- Receivables turnover

Alfa Corporation. Income Statement	
Particulars	Rs. ('000)
Net Sales	4222
Cost of Goods Sold	-2355
Depreciation	-374
Earnings before interest and taxes	1493
Interest	-240
Taxable Income	1253
Taxes	-277
Net Income	976
Dividends	488
Retained Earnings	488

Additional Information

The inventory of the firm is worth Rs. 512,000 while accounts receivable are Rs. 280,000.

16. From the data given below, compute "Earning per Share" and "Price-Earnings Ratio":

Items	Rs. (in Millions)
Current Assets	470
Net Fixed Assets	550
Outstanding shares	65
Sales	830
Net Income	615
Market price per share	65

17. From the given information, estimate the figures of total assets and total equity to further calculate Return on Assets (ROA) and Return on Equity (ROE):

Items	Rs.
Cash	30,000
Accounts receivable	89,000
Inventory	90,000
Net fixed assets	680,000
Accounts payable	155,000
Accruals	125,000

Bank loan and short-term loan	60,000
Long term debt	250,000
Common stock	250,000
Retained earnings	100,000
Sales	530,000
Cost of goods sold	360,000
Net profit	45,000

18. A company has a dividend payout ratio of 25%. Calculate its retention ratio and the amount disbursed as dividends to shareholders if the net income of the company is Rs. 500 million.

19. The following data pertains to XYZ Company:

20. Particulars	Rs. (millions)	Particulars	Rs. (millions)
Gross Income	380	Cash Dividends	150
Net Income	200	Retained Earnings	50

You are required to calculate “Dividend Payout Ratio” and “Retention Ratio”.

20. Calculate the maximum sustainable rate of growth for a firm with an ROE (Return on Equity) of 15 percent and dividend payout ratio of 35 percent.

21. By using the given information of a firm, calculate its Return of Equity (ROE) using DuPont analysis technique:

Items	Rs.
Cash	4,665
Accounts Receivable	5,250
Inventory	5,160
Net Plant and Equipment	35,400
Common Stock and Paid in surplus	9,900
Retained Earning	16,500
Net Income	9,900
Sales Revenue	34,500

22. Mr. Abid is planning to invest Rs. 500,000 at a simple interest rate of 8% for 5 years. Calculate how much amount he would have after three years.

23. Mr. Shakir is planning to invest Rs. 500,000 at a compound interest rate of 8% for 5 years. Calculate how much amount he would have after three years.

24. Mr. Nadeem plans to invest Rs. 1,000,000 for 5 years in a bank. Based on the information provided below, suggest to him the best option for investment.

Bank	Annual Interest Rate	Type of Interest
Bank A	8.0%	Simple Interest
Bank B	7.5%	Compound Interest

25. Mr. Anwar invested Rs.50,000 in a 12%, 60-day certificate of deposit, what will be the total proceeds at the end of certificate of deposit period?

26. If you anticipate a need of Rs. 600,000 for a vacation in two years and you can earn 8% interest on your savings, how much should you invest today to cover the cost of your vacation?
27. Suppose you are 20 years old now and can invest money at 12%. Your aim is to get Rs. 1,000,000 at the age of 40. Calculate the amount you should invest today.
28. Suppose that you will receive Rs. 500,000 after 15 years from an investment into the bank. You are now required to calculate the:
- Present value of the investment if you invest your money at 6 percent compounded annually?
 - Present value of your investment if you invest the same amount at 9 percent compounded annually?
29. Mr. Aqib needs Rs. 1,500,000 to buy a new vehicle. If he has Rs. 600,000 now to invest at 12 percent compounded annually, how long will it take to have the amount for buying new vehicle?
30. Mr. Aqdas has Rs. 300,000 to invest today and he requires Rs. 500,000 after 5 years for his child's admission in a school. What interest rate he must earn on his investment to meet the cost of school admission?
31. Considering the following year-end cash flows, calculate the present value if the discount rate is 12%:

Years	1	2	3	4	5
Cash Flow (Rs.)	100,000	150,000	120,000	210,000	180,000

32. Mr. Hassan plans to buy a new car for Rs. 2,000,000. The local bank will provide him a loan at 10% per year (0.83% per month) for 5 years (60 months). How much will each monthly payment be?
33. Mr. Saeed wants to renovate his house after 5 years and requires Rs. 1,000,000 at that time. He can earn 12% compounded annually if he decides to deposit an equal amount every year for a period of 5 years. Find out the amount of each deposit.
34. An annuity with a cash inflow of Rs. 10,000 for each of the six (6) years assumes that interest payments occur at the beginning of each year. What will be the future value of the annuity after 5 years if it can earn 10 percent annually?
35. Determine the effective interest rate, compounded quarterly, equivalent to 15% annually.
36. A bank offers a 26% annual percentage rate (APR) on its consumer loan. The bank requires you to make payments each month. What is the interest rate you actually pay?
37. A person intends to save up money for the future. Two banks provide following savings account options. which banks provide a good choice for more effective interest rates.
- Bank A offers 22.5% rate compounded quarterly.
 - Bank B offers 23 % rate compounded semiannually.

38. Let's say you are thinking about making an investment that will yield Rs 15,000 per year for the next eight years. What is the cash flow series' present value if your opportunity rate is 9%?
39. A bond having a 11% coupon rate and ten years to maturity is issued by a corporation. The bond has a face value of 50,000 rupees. Determine the coupon's present value if the market interest rate is 10%.
40. Assume that a Company releases a 9-year bond with a face value of Rs. 10,000 and a coupon rate of 8%. Given the current state of the market, what is the bond's current worth assuming a 14% necessary rate of return is justified?
41. The face value of the bond issued by ABC Corporation is Rs. 2000. It provides Rs. 200 as annual coupon for next 20 years. Determine the present value of the coupon payment if the market demands a 10% rate of return on comparable bonds.
42. Bonds from SNT Inc. have a face value of Rs. 1200. The bonds mature in 12 years, with an annual coupon of Rs. 100. For comparable bonds, the market requires a return of 10%. Determine the bond's value and specify if it is a premium or discount bond.

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Important Note:

The **solution file** will be uploaded by the end of next week. You may compare your attempts with the actual solution of the questions. **DO NOT** send the solution to any question through MDB, Ticket or Email.