TUTORIAL KIT
OMEGA SEMESTER

PROGRAMME: BANKING AND FINANCE

COURSE: BFN 322

CORPORATE FINANCE

DISCLAIMER

The contents of this document are intended for practice and leaning purposes at the undergraduate level. The materials are from different sources including the internet and the contributors do not in any way claim authorship or ownership of them. The materials are also not to be used for any commercial purpose.

BFN 322: CORPORATE FINANCE

Contributors: Dr. (Mrs.) F. O. Olokoyo, Dr. (Mrs) F. B. Adegboye, Miss Tolulope Oladeji

---

1. Differentiate between operating lease and financial lease

2. Explain briefly the hire purchase agreement and the advantages as well as the disadvantages.

3. Give a brief explanation on any two of the forms of finance lease.

4. Excel limited has decided to install a new machine costing N50,000. The machine has an estimated useful life of 5 years with a scrap value of N8,000 at the end of the fifth year. The new machine will generate additional cash profits of N20,000 per annum for 5 years. The company is now trying to decide the method of financing the project. The following methods of finance are being considered.
   a. Purchase the machine using the company's cash resources.
   b. Take a term loan of N50,000 now from its bank payable over 5 years with annual payments of N14,915.78 payable at the end of each year for the next 5 years.
   c. Lease the machine under an agreement that would entail payment of N12,000 at the end of each year for the next five years.
   d. Purchase the machine under a hire purchase agreement. This requires an initial deposit of N16,250 and payments of N11,000 per annum at the end of each year for the next five years. The tax authorities have agreed with the company that the interest part of the total hire purchase payment will be allocated to each year using sum of the years' digit method.

   The company can currently borrow at the rate of interest of 15% before tax from its bank. If the company purchases the machine, capital allowance on a straight line basis will be available as follows: Initial Allowance 20%, Annual Allowance 10%.
   Tax is currently payable at the rate of 35% payable one year in arrears. The company's weighted average cost of capital is 12% after tax. You are required to advise the management of Excel limited on
      a. Whether or not to purchase the machine.
      b. The most economic method of finance.
      c. Any other matter that should be considered before making the final decision on the method of financing.

5. Explain the difference between direct and indirect investing.

6. Distinguish between investment and speculation.

7. Briefly explain what an investment trust means?

8. Distinguish between the following:
    i. Private and public offer for sale.
    ii. Contract Commission and Stamp Duties.
    iii. Dealings in Quoted and unquoted securities.

9. What are the contributions of the following in the development of the capital market
    a. Registrar
    b. Issuing House
    c. Broker/Dealer
    d. Portfolio/Fund Manager

10. Why is the right of the shareholders important to the continual existence of a company?

11. Highlight the various methods and procedures of raising new issue?

12. Distinguish between quoted company and unquoted company, clearly enumerating the merit and demerits of individual company types?

13. Enumerate the different types of right of a shareholder.

14. Daniels Ltd's two accountants are in disagreement as to which of two mutually exclusive projects to undertake. One has based his conclusion on an IRR calculation, the other by finding the projects' NPVs at the company required rate of 10%. The first project requires an investment of N1,410,400 and will generate net cash savings of N300,000 per annum for 10 years. The second project only requires N867,800 to be invested to generate N200,000 for 10 years.

Required:
i. Produce the calculations of the two accountants
ii. Produce an unambiguous result by considering the incremental investment

If the alternative investment rate was 14%, which of the two projects would be accepted? Compare your result with (i) above.

15. Folab is considering investing in two securities that have the following random returns:

SECURITY A		SECURITY B	
Return	**Probability**	**Return**	**Probability**
20%	0.30	12%	0.45
15%	0.45	16%	0.40
10%	0.25	20%	0.15

Required

Calculate the expected return on portfolio (p) consisting of 80% of security A and 20% of security B

16. Distinguish between expected return and expected risk

17. Your client has the following investment portfolio:

Company	Weighting in Proportion(%)	Beta factor shares
A	10	1.2
B	30	0.7
C	25	1.4
D	35	0.8

The risk free rate is 8% and the market rate of return is 18%

Required

What is the expected rate of return from the portfolio as a whole using the CAPM?

18. Tochukwu Moses is holding a portfolio of two securities x and y both of which are quoted on the stock exchange and have the following characteristics.

Portfolio X and Y % of Return

X	Y	Probability
20	45	0.25
10	25	0.50
0	5	0.25

Both securities x and y are perfectly positively correlated. Tochukwu moses has decided to allocate his available liquid resources for investment in the two securities such that 40% goes to X and the balance is given to Y. Moses has calculated the expected return of X and Y as 10% and 25% respectively and their variances as 50% and 20% respectively.

Required:

a. Calculate the portfolio's expected return
b. What is the risk of the portfolio
c. Confirm whether the expected return 10% and 25% for X and Y respectively derived by Moses Tochukwu is correct or not.

19. Two securities, X and Y have the following expected Returns and Probabilities

% Return		Probabilities	
X	Y	X	Y
5	5	0.35	0.25

15	15	0.43	0.62
25	25	0.22	0.15

Assuming the investor invests 40% of his outlay on security x and 60% on security Y

Required:

a. Estimate returns and risk for x and Y
b. Calculate the portfolio return
c. Calculate the portfolio risk when co-efficient is
    i. 1
    ii. 0
    iii. -1

20. What are the advantages and disadvantages of right issues.

ANSWERS

Question 1

Hint to Solution: You are expected to define the two types of lease and point out the features that distinguish them.

Question 3

Hint to Solution: You are expected to a brief explanation on any two of the forms of finance lease available.

Question 5

Hint to Solution: You are expected to identify the distinguishing features of direct investing and indirect investing.

Question 7

Hint to Solution: You are expected to give a brief explanation of what you understand by investment trust.

Question 9

HINTS: Capital market is a financial market that provides facilities for mobilizing and dealings in medium and long-term funds. The players on the capital market are the operators who act as intermediaries between the providers of the funds and the fund users. They include, Securities Exchanges, Brokers/Dealers, Issuing Houses, Registrars and Investment Advisers.

The Nigerian Capital Market plays the unique role of making funds available for economic development and growth.

The duties and responsibilities of all the operators alike is what as outlined with their respective link to each other is what ascertains the development of the capital market.

Question 11

HINTS: List out the methods of raising new issues, i.e. Public offer for subscription, offer for sale e.t.c. and explain distinctively clearly describing each method.

Question 13

HINTS: List the rights of shareholders such as right to vote, preemptive right, right of proxy e.t.c. Briefly explain the individual rights clearly and distinctively.

Question 15

RA = (0.20)(0.30) + (0.15)(0.45) + (0.10)(0.25)

0.06 + 0.0675 + 0.025 = 0.1525

= 15.25%

RB = (0.12)(0.45)+(0.16)(0.40)+(0.20)(0.15)

= 0.054 + 0.064 + 0.03 = 0.148

= 14.8%

RP = WARA + WBRB

(0.80)(0.1525) + (0.20)(0.148)

0.122 +0.0296

0.15165.16%

Question 17

Share	Weight	beta factor	weighted beta
A	.10	1.2	.12
B	.30	.7	.21
C	.25	1.4	.35
D	.35	.8	.28
			0.96

Using CAPM

RP = Rf + β(Rm – Rf)

= 8% + 0.96 (18-8)

= 17.6%

Question 19

i. Estimate of return (mean) and risk (standard deviation) of x

Prob. (P)	Return(r)	pr	r – rx	$(r – rx)^2$	$P(r – rx)^2$
0.35	5	1.75	-8.7	75.69	26.49
0.43	15	6.45	1.3	1.69	0.73
0.22	25	5.50	11.3	127.69	28.9
	rx =	13.7		var	56.12

Return on x = 13.7, Risk = δx = √56.12 = 7.49, Var = 56.12

ii. Estimate of return (mean) and risk (standard deviation) of y

Prob. (P)	Return(r)	pr	r – rx	$(r – rx)^2$	$P(r – rx)^2$
0.25	5	1.15	-9.2	84.64	21.16
0.62	15	9.30	0.8	0.64	0. 39
0.15	25	3.75	10.8	116.64	17.50
	rx =	14.2		var	39.06

Return on y = 14.2, Risk = δx = √39.06 = 6.24, Var = 39.06

ii. Rp = WxRx + WyRy

Where Rp = Expected Portfolio Return

Wx = relative weight of Asset x

Wy = relative weight of Asset y

Rx = Expected Return on asset x

Ry= Expected return on asset y

Rp = 0.4(0.137) + 0.6 (0.142)
0.0548 + 0.0852
0.14 = 14%
Portfolio expected return is 14%