

1. The most risky managerial function of a financial manager in a limited liability company is A. Dividend decision B. **Investment decision** C. Acquisition decision D. Financial decision
2. Abdul borrowed N10,000 from a nearby bank on January 1, 2005 agreeing to repay the principal and interest on December 31, 2014. If the bank charges 17% rate of interest per annum, how much will be due from Abdul?
A. N41,984.00 B. N33,946.00 C. N40,456.00 D. **N48,068.00**
3. A firm set aside N60,000 at the beginning of each year to create a fund for future expansion. If the fund earns 8% per annum, how much does the fund worth at the end of 5 years?
A. N316,795.00 B. **N380,154.00** C. N734,650.00 D. N34,030.00
4. Your niece has been offered an opportunity to receive N300,000 5 years from now. If she can earn 10% on her money, how much is it worth today?
A. **N186,270.00** B. N124,180.00 C. N102,632.00 D. N322,113.00
5. You identified a 3-year investment paying 12% interest rate per annum. If you invest N825, how much will your investment be worth at the end of the period?
A. N950.56 B. N906.25 C. **N1,159.04** D. N587.22
6. The net present values of a project have been estimated as follows

<u>Discount rate(%)</u>	<u>Net Present Value (N2000)</u>
10	48
12	18
15	-5

Using the data above, determine the best approximation of the project's internal rate of return

A. 12.2% B. 15.9% C. **14.4%** D. 18.6%
7. A project cost N8million and it will generate cash flow as follows;

Year 1 N3.2 million	Year 2 N3,250,000	Year 3 N3,300,000
Year 4 N3,350,000		

If the company cost of capital is 18%, determine the project's net present value

A. **N782,460** B. N8,782,460 C. N782,000 D. N870,000
8. A project has a cost of N35,000 and its expected net cash inflows are N9,500 per annum for six years. If the cost of capital is 14%, The project's profitability index is
A. 1.06 B. 1.05 C. 0.05 D. 0.06

9. James is considering investments costing N35,000, whose random returns are given below:

<u>Year 1</u>		<u>Year 2</u>	
<u>Return(N)</u>	<u>Probability</u>	<u>Return(N)</u>	<u>Probability</u>
27,000	0.5	15,000	0.1
30,000	0.2	22,000	0.3
35,000	0.1	27,000	0.2
40,000	0.2	30,000	0.4

What is the expected value of NPV of the investment, if the return on treasury bills is currently at 12%

- A. N24,713 B. N12,481 C. N25,500 D. N22,768
10. Which of these best describes the trade-off relationship between risk and return?
- A. Risk and return go hand in hand C. Return should be higher than risk
 B. Risk should be higher than return. D. Risk and return move in opposite way.
11. Is the tendency that actual outcome may differ from the expected result?
- A. Annuity B. Ordinary Annuity C. Risk D. Uncertainty
12. A firm is faced with the choice of selecting from three available projects with the following cash flow/return profiles. Which project is the best?

Probability(%)	Project A	Project B	Project C
	N	N	N
0.20	200	160	200
0.50	160	200	90
0.30	90	90	A

- A. Project B B. Project C C. Project A D. None of the above
13. BOBBY NIG Ltd incurred a fixed cost of N150,000 in producing 120,000 of empty crates for the manufacturer of Thumbs up, a new brand of soft drinks. It sell a crate for N150 but incurs a variable cost of N100 on a crate. The company capital structure is made up of N1,000,000 equity share and N600,000, 10% debenture. What is the company degree of combine leverage?
- A. 1.15 B. 1.33 C. 1.48 D. 1.54

For Questions 14-16

A medium sized firm engaged in commercial agriculture incurs N250,000 fixed cost annually in producing 15,000 kg of cereals in Adamawa State for sale to a Lagos-based food processing firm at N550 per kg. variable cost is N200 per kg. the agricultural firm's capital structure comprises 10% preference shares worth N500,000 and 15% debentures worth N1 million apart from ordinary shares worth N1 million.

14. What is the firm's degree of financial leverage assuming a corporate income tax rate of 50% per annum?

- A. 1.09 B. 1.05 C. 1.14 D. 1.13

15. What is the degree of operating leverage?

- A. 1.05 B. 1.04 C. 1.06 D. 1.03

16. What is the total or combined degree of leverage?

- A. 1.14 B. 1.13 C. 1.15 D. 1.10

17. AbatPlc issued its 12% irredeemable debentures at N100 per unit. If the current market price is N90 and corporate tax rate is 35% per annum, what is its after-tax cost of capital?

- A. 13.3% B. 4.7% C. 8.7% D. 12.0%

18. A firm's ordinary shares are currently selling for N55 per share and expectations are that a dividend of N5.50 per share will be paid at the end of the year. Dividends for the past five years are as follows:

2013	N5.17	2012	N4.92	2011	N4.68
2010	N4.46	2009	N4.25		

Assuming the firm expects to not N52.50 per share on a new share after flotation costs, calculate its cost of equity capital.

- A. 15.3% B. 19.3% C. 18.8% D. 18.4%

19. ABC Ltd has in issues 2,000,000 ordinary share of N1.00 each with a current market value of N3.60 per share. Ordinary dividend of N1.26 million was recently paid and dividend annual growth rate is 12%. Determine the cost of equity

- A. 31% B. 32% C. 35% D. 30%

20. Bobby Plc has an issue 17.5% N2,000,000 irredeemable preference share with a current market value of N3,000,000. Determine the cost of preference share to one decimal place.

11.6% B. 11% C. 11.7% D. 17.5%

21. Keshi State of Nigeria which has taken a loan of ₦100 million, some years ago to provide infrastructures to the citizenry has now decided to magnetize the debt by ranking five equal payment at 19% compounded annually. What is the amount of each payment?

(a) ₦32,705,000 (b) ₦13,705,016.66 (c) ₦19,000,000 (d) ₦32,705,016.65

22. The rustiest decision to take by company-management as it affects both the company and the shareholders is

(a) Business (b) Investment decision (c) Financing decision

(d) Dividend decision

23. Sloan Water Ltd., a bottler of purified spring water sells 500,000 bottles per annum. Each bottle involves a variable operating cost of ₦7, and sells at ₦12. Fixed operating costs are ₦100,000. The company has current luterest charges of ₦50,000 and preference share dividends of ₦60,000. Corporate income tax is currently 40%. Determine the company degree of financial leverage.

(a) 1.06(b) 1.07 (c) 1.04(d) 1.11

24. ABC Ltd. is considering a project costing ₦45,000 and net cash inflows are ₦25,500 per annum for 3 years. If the company cost of capital is 20%, determine the company's net present value (NPV)

(a) ₦8,725 (b) ₦18,215 (c) ₦31,500 (d) ₦8,703

25. A project has a cost of ₦35,000 and itsexpected net cash inflows are ₦9,000 per annum for six years. If the cost of capital is 12%, calculate the project pay back period to one occiliral place.

(a) 9 years (b) 3.88 years (c) 3.89 years (d) 4.0 years

26. A company's operating break-even points sensitive to three variables such as operating fixed cost-and-operating variable cost-as well as:

- (a) Actual Cost (b) Unit Selling Price (c) Variable Cost (d) Combined Leverage

27. Yoyo Enterprises Ltd. has its ordinary share currently selling at ₦7.50 each on Nigerian Stock Exchange. The company has recently paid dividend of 15k and future dividend is expected to grow at 8% per annum. What is Yoyo's cost of equity?

- (a) ₦14.50 (b) 14.5% (c) ₦14.0 (d) 14%

28. The size and importance of the finance function in a business firm depends primarily the

- (a) Profitability of the firm's operation (b) Financial structure of the firm (c) Size of the firm (d) Custom and practice in the country in which the is domiciled

29. Business firms can be classified as investment intermediaries because

- (a) They distribute their surplus profits to investors in form of dividends (b) They raise funds from the investing public and invest them in real and financial assets (c) They invest in real and financial assets (d) They employ professional managers to manage their affairs

30. Wealth maximization is considered superior to profit maximization as an objective of the firm on the following basis with the exception of

- (a) Recognition of the prospect of a firm in the short-run (b) Explicit consideration of risks in investments (c) Recognition of the importance of distributing returns to shareholders (d) Recognition of the perception of shareholders about the returns realizable from their investments.

SOLUTIONS (1 - 20) ONLY

1. Investment decision simply means investment in long term capital asset which will generate future economic benefit to the organization thereby minimizing the wealth of the shareholders. This decision is the most risky decision because any decision determines the long term status of the organization.

B.

2. Abdul borrowed the money to pay back in 10 years time and that makes it a long sum payment compounded annually.

$$\begin{aligned}FV &= PV (1+r)^n \\&= 10000(1 + 0.17)^{10} \\&= 10000 (1.17)^{10} \\&= 10000 \times 4.8068 = \text{N}48,068.00\end{aligned}$$

D.

3. A fan annuity is a sum of money that is paid or received periodically. There are two types of annuity, they include:

- Ordinary Annuity: Sum of money paid or received at the end of a month or year
- Annuity Due: Sum of money paid or received at the beginning.

In this question the firm sets aside a sum of money at the beginning of each year and this what makes it annuity due.

Annuity due =

FV =

$$A = 60000 \quad n = 5 \text{ years}$$

$$r = 17\%$$

$$FV = 60000$$

$$= 60000$$

$$= 60000$$

$$= 60000$$

$$= \cancel{77} \cancel{77} 38014.000$$

Considering approximation among B. (~~₦~~380,100.00)

$$4. \quad PV = \text{or} \quad PV = FV (1+r)^{-n}$$

$$\text{Where } FV = 300000 \quad n = 5 \text{ years}$$

$$r = 10\%$$

$$PV = 300000 (1 + 0.10)^{-5}$$

$$= 300\,000 (1.1)^{-5}$$

$$= 300\,000 (0.620921323)$$

$$= \underline{\underline{\text{₦}186276.40\text{k. (A)}}}$$

$$5. \quad FV = PV (1+r)^n$$

$$PV = 825$$

$$n = 3$$

$$r = 12\%$$

$$FV = 825 (1 + 0.12)^3$$

$$= 825 (1.12)^3$$

$$= 825 (1.404928)$$

$$= \underline{\underline{\text{N1,159.07k. (C)}}}$$

6. IRR [Internal rate of return]

$$\text{IRR} = \text{LR} + (\text{HR} - \text{LK})$$

OR

$$\text{IRR} = \text{LR} + (\text{HR} - \text{LK})$$

$$\text{IRR} = 12\% + (15 - 12)\%$$

$$\text{IRR} = 14.4\% \text{ (C)}$$

7. Year	Cash flows	DF@18%	PV
0	(8000000)	1	(8000000)
1	3200000	0.8475	2,711864.407
2	3250 000	0.71818	2,334099.397
3	3300 000	0.6086	2008 481.88
4	3350 000	0.51579	1 727 892.732
NPV			<u><u>= 78 2338.416 (A)</u></u>

8. Years	Cash flows	DCF@ 14%	N
0	(35000)	1	(35000)
1 – 6	9500	3.887	36942.34
			<u>1942.34</u>

Profitability index (P.I)

$$= \text{OR } 1 +$$

Profitability index: This is the ratio of PV to the cost of the project

$$= 1.055 \quad \text{OR}$$

$$= 1 + = 1.055$$

9	Year	1		Year 2		
	Return	Pi	$\mu p_i r$	μ	Pr	μp_i
	27000	0.5	13000	15000	0.1	1500
	30000	0.2	6000	22000	0.3	6600
	35000	0.1	3500	27000	0.2	5400
	40000	0.2	8000	30000	0.4	12000
			<u>Eup_i = 31000</u>			<u>Eupo = 25500</u>

$$NPV = - \text{Cost} + + +$$

$$= - 35000 + +$$

$$= \underline{\underline{\text{N}13007.02}}$$

10. A

11. C

12.	EV _A	EV _B	EV _C
	0.2 x 200 = 40	0.2 x 160 = 32	0.2 x 200 = 40
	0.50 x 160 = 80	0.50 x 200 = 100	0.5 x 90 = 45
	0.30 x 90 = 27	0.30 x 90 = 27	0.3 x 90 = 27
	<u> </u>	<u> </u>	<u> </u>
	<u> </u>	<u> </u>	<u> </u>

Based on the computation project

B will be the preferred project as its has the highest return.

13. Degree of operating leverage =

Contribution [S - VC]

EBTT [Earnings before interest &]

=

= 1.33

Degree of financial leverage

= -

=

= **1.154**

14. D0fl =

=

= **1.05(B)**

15. D00l =

=

= **1.05** (A)

16. D0cl = D00l x D0fl

= 1.05 x 1.05

$$= \underline{\underline{1.10}}(\text{D})$$

17. $K_d = x$

$$R = 12\% \text{ of } 100 = 12$$

$$K_d = x$$

$$= \underline{\underline{8.67\%}} (\text{C})$$

18. $K_e = + g$

$$g = x \ 100$$

$$= \quad \quad x \ 100$$

$$= \underline{\underline{5.02\%}}$$

$$K_e = + 0.0502$$

$$= \underline{\underline{15.497\%}} (\text{A})$$

19. $K_e = + g$

$$D_0 =$$

$$= \quad = 0.63$$

$$K_e = + 0.12$$

$$= \underline{\underline{31.6\%}}(\text{B})$$

20. $K_p = x \ 100$

$$P_d = 0.175 \times 200 \ 000 = 350000$$

$$K_p = x$$

$$= \underline{\underline{11.67\%}} (\text{C})$$

