Chapter 12

Investment: Securities

INTRODUCTION

Investors have a range of investment opportunities to choose from. They measure these investment opportunities against criteria for a good investment. Investors set financial goals and consider different factors when making investment decisions.

An investor should consider the advantages and disadvantages of each form of investment to ensure making an informed decision.

Overview

TOPIC	CONTENT	CONTENT DETAILS FOR TEACHING, LEARNING AND ASSESSMENT PURPOSES

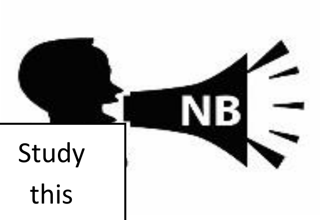
Investments: Securities	• Functions of the Johannesburg Securities Exchange
	• Description of types of investment opportunities
	• Analysis of the risk factor of the above mentioned investment opportunities.
	• Types of shares
	• Impact of the following forms of investment
	• Meaning of debentures, dividends, capital gain, simple interest, compound interest.
	• Factors that must be considered when making investment decisions.
	• Distinction between compound interest and simple interest.
	• Calculation of compound and simple interest.
		• Outline/Describe/Explain/Discuss the functions of the JSE.
		• Explain a range of available business investment opportunities e.g.:
		  ○ Government/RSA retail savings bonds
		  ○ Unit trusts
		  ○ Shares
		  ○ Fixed deposit
		  ○ Managed portfolio
		  ○ Debentures
		  ○ Fixed property
		  ○ Mutual funds/stokvels
		  ○ Business ventures/venture capital
		  ○ Endowment/Life insurance policies/Retirement Annuities.
		  ○ 32-day notice accounts/Call Deposits
		• Analyse the risk factor of each type of investment opportunity.
		• Name/Describe/Explain/Discuss the types of shares.
		• Explain the difference/Differentiate between ordinary and preferences shares.
		• Outline/Describe/Explain the rights of preferences shareholders
		• Explain/Describe the types of preference shares.
		• Describe and evaluate (positives/negatives) of the following forms of investment:
		  ○ Government/RSA retail savings bonds
		  ○ Unit trusts
		  ○ Shares
		  ○ Fixed deposit

TOPIC	CONTENT	CONTENT DETAILS FOR TEACHING, LEARNING AND ASSESSMENT PURPOSES
Investments: Securities		• Define/Explain the meaning of debentures, dividends, capital gain, simple interest, compound interest. • Outline/Explain/Discuss the factors that must be considered when making investment decisions. • Explain the differences between/Distinguish between compound interest and simple interest. • Calculate compound and simple interest from given scenarios. • Recommend types/forms of investment based on the calculations.

12.1 Key concepts

These definitions will help you understand the meaning of key Business Studies concepts that are used in this chapter.

Term	Definition
Investment	Investing/Saving money in order to yield better returns.
JSE/Johannesburg Security Exchange	Is a formal market, trading in shares, comprising of all the public companies that have been listed.
Share	It gives investors the opportunity to obtain a part ownership of a company.
Capital Market / securities market	It is the market for securities/shares where companies and the government can raise long-term funds.
Short term investment	An investment for a period shorter than one year.
Long term investment	An investment for a period for longer than one year.
Fixed rate	The rate of return stays the same for the period of time.
Accumulated	Interest earned over the investment period.
Simple interest	Calculated on the original/principal amount invested.
Compound interest	Calculated each period on the original/principal amount including all interest accumulated during past periods.
Risk	Refers to the chance that the invested amount may reduce in value/lost in total over a period of time, due to unforeseen circumstances.



Study this question well.

12.2 Functions of the Johannesburg Securities Exchange

- Gives opportunities to financial institutions to invest their funds in shares.
- Serves as a barometer/indicator of economic conditions in South Africa.
- Keeps investors informed on share prices by publishing it daily.
- Acts as a link between investors and public companies.
- Small investors are invited to take part in the economy of the country through the buying/selling of shares.
- Raises primary capital.
- Provides protection for investors.
- Encourages short-term investment.

12.3 Investment opportunities

Description

Types of investment opportunities	**Description**
Government/RSA retail savings bonds	• The SA Government offers SA citizens the opportunity to invest in saving bonds, to encourage saving.
Unit trusts	• A collection of investment options/methods made up of shares in different companies. • The investments of a number of investors are pooled together in a unit trust fund, managed by a fund/portfolio manager/expert.
Shares	• A portion of ownership sold to shareholders in the form of shares.
Fixed deposit	• A conservative method of investment at a fixed rate for a fixed period/at a financial institution/bank.
Managed portfolio	• An investor instructs a financial institution/bank/financial advisor to manage his/her various investments/assets in one portfolio.
Debentures	• It is issued to raise borrowed capital from the public and most types of debentures can be traded on the JSE. • The lender/debenture holder agrees to lend money to the company on certain conditions for a certain period.
Fixed property	• Buying a house/piece of land is usually suitable as a long term investment only. • Return on property is earned in the form of rental/sales/capital gains at a higher price than what it was bought for (including the transfer costs and taxes).
Mutual funds/stokvels	• An informal savings scheme to which a relatively small group of people contribute. • A stokvel is usually managed by a trustworthy chairman/treasurer, who will be responsible for keeping records and managing the bank account.
Business ventures/venture capital	• Venture capital is given by an investor/businesses to start up/expand a business in return to have a share in the new/expanded business.

Endowment/Life insurance policies	• A monthly payment to an insurance company with the expectancy of receiving a pre-determined amount on a date in the future.
Retirement Annuities	• A monthly payment to an insurance company in return for a certain amount of money at retirement age.
32-day notice accounts/Call Deposits	• Money is invested at a fixed rate, although withdrawals may be made provided the bank is given 32 days' notice of the withdrawal.

Activity 1

1.1 Identify the types of investment opportunity that is available for Sam in each statement below:

1.1.1 Masakhane savings scheme has invited Sam to join the scheme.
1.1.2 Interest is earned twice in this investment option.
1.1.3 Money can be withdrawn anytime in this investment option.
1.1.4 The bank must first be notified within a specific period of time before money is withdrawn.
1.1.5 A fixed amount of money is invested and can only be withdrawn after a predetermined period.

(10)

Answer to activity 1

1.1.1 Mutual funds/stokvels√√
1.1.2 Government/RSA retail savings bonds√√
1.1.3 Unit trusts√√
1.1.4 32-day notice accounts/Call Deposits√√
1.1.5 Fixed deposit√√

(5 x 2) (10)

Analysis of the risk factor of the investment opportunities

Types of investment opportunities	Risk factor
Government/RSA retail savings bonds	• Risk is very low, as an investment is made in the government who cannot disappear/go bankrupt. • It is a safe investment, as it cannot be sold on the open market/not exposed to market risks.
Unit trusts	• Investment may be made in high and low risk shares, which spread the risk throughout the fund and lowers the risk for all the investors/fund members.
Shares	• Shares have low/medium risk over a long term/investment period depending on the chosen type of shares. e.g. o Ordinary shares have the highest risk as the investor may lose the full or part of the investment when the company is dissolved/bankrupt/liquidated. o Preference shareholders' risk is lower, as they have preferential claims on the assets of the liquidated company/may receive some compensation before ordinary shareholders.
Fixed deposit	• Very low as the investor will receive what was promised. • The interest rate is usually fixed, the return will not be affected by market fluctuations.
Managed portfolio	• Risk is lower over a longer term/period. • Investments are made in various sectors/companies, therefore the risk is spread and better managed by the portfolio manager.
Debentures	• Debentures have a low risk as they must be paid back.
Fixed property	• Low risk over a long term. • Risk may be determined by economic conditions and may influence the value of property.
Mutual funds/stokvels	• Money in a savings account is a safe investment, but with low interest rates.
Business ventures/venture capital	• High risk for the investor(s) if the history of the company is not well researched.
Endowment/Life insurance policies/Retirement Annuities	• Low risk, as the insured amount will be paid out regardless of circumstances.
32-day notice accounts/Call Deposits	• Low risk, as investment plus interest will be paid out on the maturity date of the investment. • Interest is calculated on the daily balance, accelerating the value/return on the investment/lowering the risk.

Types of shares

Types of shares	Description
Ordinary shares	• Standard shares with no special rights or restrictions. • Shareholders may receive higher dividends when the company has made large profits.
Preference shares	• These shares enjoy preferred claim on company assets in event of bankruptcy/liquidation. • A fixed rate of return is paid on this type of share.
Founder shares	• Shares that belongs to shareholders who started the company.
Bonus shares	• Shares that are issued to existing shareholders as compensation for loss of dividends.

Differences between ordinary and preference shares

Ordinary shares	Preferences shares
• Ordinary shares only receive dividends when profit is made.	• Some of these types of shares receive dividends regardless of profit made.
• Normally the higher the profit the higher the dividends	• A fixed rate of return is paid on these type of shares.
• Shareholders are the last to be paid, if the company is declared bankrupt.	• Shareholders have a preferred claim on company assets in the event of bankruptcy.

Rights of preferences shareholders

- Receive dividends regardless of how much profits are made.
- Receive a fixed rate of return/dividend.
- They are paid first/enjoy preferential rights to dividends.
- They have a preferred claim on company assets in the event of bankruptcy/ liquidation of the company.
- Receive interim and annual reports.
- They only have voting rights at the Annual General Meeting under particular circumstances/for certain resolutions.

Activity 2

Explain THREE types of preference shares. (9)

Answer to activity 2

Participating preference shares√√
- Shareholders are guaranteed minimum fixed dividends.√
- They are entitled to shares in any surplus company profits.√
- They have preferential rights over ordinary shares on repayment when the company closes down.√

Sub max (3)

Cumulative preference shares√√
- Shareholders are entitled to receive minimum fixed dividends√
- They receive dividends not previously paid out when profits were too low.√

Sub max (3)

Non-cumulative preference shares√√
- Shareholders are not compensated for past dividends that were not paid out when profits were low.√

Sub max (3)

Redeemable preference shares√√
- Shares can be redeemed/bought back at the option of the issuing company, either at fixed price on a specified date/over a certain period of time.√

Sub max (3)

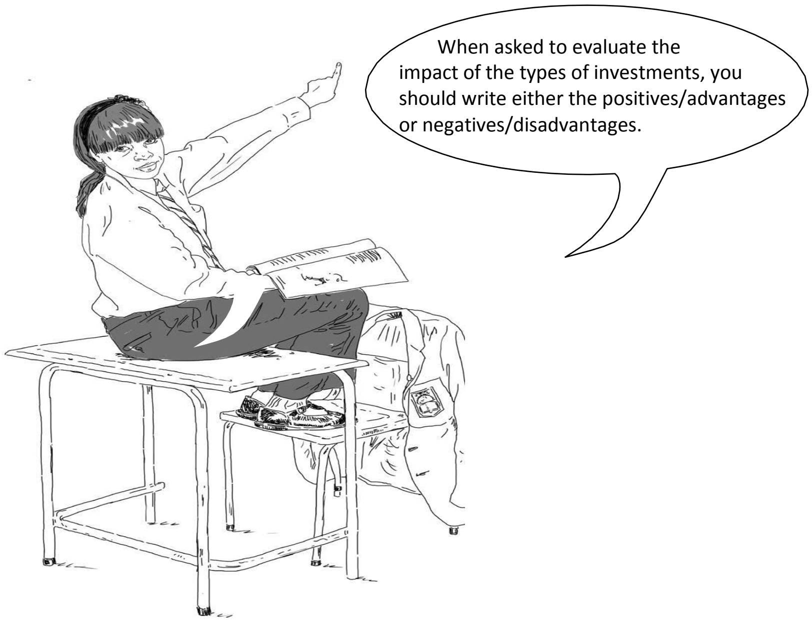
Convertible preference shares√√
- Shares are converted into predetermined number of ordinary shares on the date specified when the preference shares were issued.√

Sub max (3)

Max (9)

NOTE: Only the first THREE responses will be marked.
When the numbers of facts are specified, then markers will only mark the number of facts required.

12.4 Impact of the forms of investment opportunities



Government/RSA retail savings bonds	
Positives/Advantages	**Negatives/Disadvantages**
• Guaranteed returns, as interest rate is fixed for the whole investment period. • Investment may be easily accessible, as cash may be withdrawn after the first twelve months, subject to penalties. • No charges/costs/commissions payable on this type of investment.	• Retail bonds cannot be ceded to banks as security for obtaining loans. • A minimum of R1 000 must be invested, which may be difficult for some small investors to accumulate. • Retail bonds are not freely transferable amongst investors. • Investors need to have valid SA identification/should be older than 18 years.

Unit trusts	
Positives/Advantages	**Negatives/Disadvantages**
• Managed by a knowledgeable fund manager to buy shares on the stock exchange. • Safe investments, as it is managed according to rules and regulations. • A small amount can be invested per month. • Easy to invest in, as investors simply fill in several forms or invest online. • Easy to cash in when an investor needs money.	• If blue chip companies' growth path declined the growth of the unit trusts will also be affected. • Unit trust holders are not allowed to borrow against their investment. • Not appropriate for short term investments. • Not advisable if investors want to avoid risks at all costs.

Shares	
Positives/Advantages	**Negatives/Disadvantages**
• Holding a higher number of shares may result in higher proportional dividend pay-outs. • Can be freely transferred/traded on the JSE. • Shareholders' liability to the debt of the company is limited to what was invested/Shareholders have limited liability for company debts. • Holders have voting rights at the annual general meeting (AGM).	• Holders may receive less dividends/no dividends when company profits are low. • Companies have no legal obligation to pay dividends to shareholders. • Risk may be high, as investment may be lost when companies are liquidated. • Dividends declared may be determined by the management/directors of the company/business.

Fixed deposit	
Positives/Advantages	**Negatives/Disadvantages**
• Interest is earned at a fixed rate regardless of changes in the economic climate. • The investor can choose the investment period. • It has a low risk as investors are guaranteed a final payment.	• The investor cannot withdraw their funds before the maturity date. • May not outperform the effect of inflation over long term. • Low return compared to other investments.

12.5 Investment concepts

Description of investment concepts

Debentures

- It is issued to raise borrowed capital from the public and most types of debentures can be traded on the JSE.

Dividends

- The return on an investment in shares.

Capital gain

- The return on property/fixed assets/investments.

Simple interest

- The interest is calculated on the original/principal amount invested.

Compound interest

- The interest is calculated for each period on the original/principal amount including all interest accumulated during past periods.

Activity 3

1.1 Identify an investment concept represented by EACH statement below:

1.1.1 A type of loan issued by a company to borrow money, usually at a fixed rate of interest.
1.1.2 The return on investments that shareholders receive.
1.1.3 Interest is earned on the original amount and not on the accrued amount.
1.1.4 An increase in the value of the money investment
1.1.5 Interest is earned on the original amount invested and interest earned in previous periods. (10)

Answer to activity 3
1.1.1 Debenture√√
1.1.2 Dividends√√
1.1.3. Simple interest√√
1.1.4 Capital gain√√
1.1.5 Compound interest√√
(5 x 2) (10)

12.6 Investment decisions

Factors to consider when making investment decisions

hint

Ensure that you can name & explain each factor.

Return on investment
- Refers to income from the investment, namely interest, dividends or capital appreciation (growth/increase) on the original amount invested.
- Generally, there is a direct link between risk and return.

Risk
- Refers to the chance that the invested amount may reduce in value/lost in total over a period of time, due to unforeseen circumstances.
- The higher the potential return, the higher the risk of a potential loss.
- Example: investing in shares has a higher risk than investing in a fixed deposit.

Liquidity
- An amount of capital could be invested in a type of investment that can easily be converted to cash.
- The term liquidity is used to describe the ease and speed with which investors can convert an investment into cash.
- Example: an investment in a savings account will be easier to convert into cash than an investment in a fixed deposit which is usually deposited for a fixed period of time.

Taxation
- A good investment will yield good after-tax returns.
- Income tax implications must be considered in order to ensure a high net after tax return.
- Tax rates are not necessarily the same for different investments.

Inflation rate
- Inflation refers to a decrease in the value of money due to rising prices.
- People are affected by a high inflation rate because their money/purchasing power decreases.
- The return on investment should be higher than the inflation rate.

Investment period

- This refers to the duration of the investment which may influence the return on investment.
- It can be short, medium and/or long term.
- The investment period will depend on a customer's personal needs.

Investment planning factors

- Investors should always consider the safest possible investment opportunities.
- Some investments offer a low income on invested capital, but it could be a safer investment than one that promises a higher income.
- Examine opportunities with a history of good return.

Budgets

- Investors can determine the amount of surplus money that can be invested.
- Investors must budget for unforeseen costs.

Volatility/Fluctuations on investment markets

- Fluctuation in national and international economic trends should be considered.
- The level of volatility will determine the amount of returns.

12.7 Simple interest and compound interest

Differences/Distinction between simple interest and compound interest

SIMPLE INTEREST	COMPOUND INTEREST
• Calculated on the original/principal amount invested.	• Calculated each period on the original/principal amount including all interest accumulated during past periods.
• Accumulated interest from prior periods is not used in calculations for the following period.	• Accumulated interest from prior periods is used in calculations for the following period.
• Interest charged remain fixed for the full period of investment.	• Based on the concept of adding accumulated interest to the original/ principal amount and interest is earned on interest.

Calculation of simple interest

Simple interest is calculated on the original/principal amount invested.

FORMULA: Interest = P x R x T

Simple interest = Principal (amount invested) x percentage interest rate x time in years/months

I = P x R x T

Remember to always show all your calculations in tests and exams.

Activity 4

Jack invested R100 000 in a fixed deposit for three years. The bank offers him 11% simple interest.

Calculate the interest that Jack would receive after the three years.

(3)

Answer to activity 4

I	**=**	**P**	**x**	**R**	**x**	**T**
	=	100 000	x	11%	x	3
	=	100 000	x	11/100	x	3
	=	100 000	x	0.11	x	3
Interest	=	R 33 000 √√√				

Activity 5

Zizi invests R 3000 in a savings account at a bank where he will receive 10% simple interest p.a., paid out every 6 months.

Calculate the interest amount Zizi will receive after 2 years.
(3)

Answer to activity 5

FORMULA: Interest = P x R x T √

Option 1: R3 000√ x 10% x 2 years√ = R600√

OR

Option 2: R3 000√ x 10% x 6/12 √ = R150
R150 x 4 = R600√

OR

Option 3: R3 000√ x 10% x 6/12 x 4√ = R600√

Max (3)

Calculation of compound interest

Compound interest is calculated each period on the original/principal amount including/plus all interest accumulated during past periods.

Interest = $P(1+i)^N - P$

P = Principal amount (initial investment)
i = percentage interest rate
n = number of years

Activity 6

Jill wants to invest R 25 000 in a fixed deposit for three years. The bank offers her 10% <u>compound</u> interest.

1. Calculate the interest that Jill would receive after three years. (8)

Answer to activity 6

1. **Option 1**

Year 1:	R25 000√ x 10%	=	R 2 500 √
Year 2:	R27 500√ x 10%	=	R 2 750√
Year 3:	R30 250√ x 10%	=	R 3 025√
Total interest		=	R 8 275√√

OR

Option 2
$P(1+i)^N - P$√

25 000√$(1+0,1)^3$√√ OR 25 000√$(1,1)^3$√√ OR 25 000√(1,331)√√ - 25 000√√

= R 8 275√√

Max (8)