

## Subjective Solved By

### Question No: 29 ( Marks: 3 )

---

Find out YTM of 1 year 12% coupon bond selling at \$130. (Face value of bond = \$100).

Solution:

Current yield = yearly coupon payment/price paid

Current yield =  $12/130$

Current yield = 0.0923

Current yield = 9.23%

Capital Gain or Loss =  $130 - 100/100$

Capital Gain or loss =  $30/100 = 0.3$  loss above the face value

Now,

Current yield – Capital loss

=  $9.23 - 0.3$

= 8.93

As we know

Bond Price > Face Value:

$130 > 100$

Coupon Rate > Current Yield > Yield to Maturity

$12\% > 9.25\% > 8.93\%$

### Question No: 29 ( Marks: 3 )

---

Find out YTM of 1 year 10% coupon bond selling at \$120. (Face value of bond = \$100).

Solution:

Current yield = yearly coupon payment/price paid

Current yield =  $10/120$

Current yield = 0.08333

Current yield = 8.33%

Capital gain or Loss = Change in the price of the bond/ price of the bond

Capital Gain or Loss =  $120 - 100/100$

Capital Gain or loss =  $20/100 = 0.2$  loss above the face value

Now,

Current yield – Capital loss

=  $8.33 - 0.2$

= 8.13

As we know

Bond Price > Face Value:

$130 > 100$

Coupon Rate > Current Yield > Yield to Maturity

$10\% > 8.33\% > 8.13\%$

## Subjective Solved By

### Question No: 32 ( Marks: 5 )

---

Ahmad purchases a 10 year 8% coupon bond with the face value of \$100. He wants to hold this bond for 1-year and then sells a 9-year bond after 1-year.

- (i) If interest rate does not change then what will be the rate of return?

Solution:

Rate of return =  $8/100$

Rate of return = 0.08

Rate of return = 8%

- (ii) If interest rate falls to 6% then suppose price increases to \$109.16. What will be the capital gain after the price rise?

Solution:-

If interest rate falls to 6% over the year then through using bond pricing formula we can see that

You bought a 10-year bond for \$100 and sold a 9-year bond for \$109.16

Now,

\$8 is coupon payment

$109.16 - 100 = 9.16$  is capital gain

- (ii) After the price rise, what will be the one year holding period return?

So now, one year holding Period return =  $\$8/100 + 109.16 - 100 / 100$

// =  $8/100 + 17.16/100$

// =  $17.16 / 100$

// = .1716

// = 17.16%

### Question No: 30 ( Marks: 3 )

---

#### Why stocks are risky?

Stockholders receive profits only after the firm has paid everyone else, including bondholders

1. It is as if the stockholders bought the firm by putting up some of their own wealth and borrowing the rest
2. This borrowing creates leverage, and leverage creates risk
3. Imagine a software business that needs only one computer costing \$1,000 and purchase can be financed by any combination of stocks (equity) and bonds (debt). Interest rate on

## Subjective Solved By

bonds is 10%. Company earns \$160 in good years and \$80 in bad years with equal probability

### Question No: 31 ( Marks: 5 )

---

Discuss the negative consequences of information costs and also suggest their solution.

#### information costs

i

1. Information plays a central role in the structure of financial markets and financial institutions
2. Markets require sophisticated information in order to work well, and when the cost of obtaining information is too high, markets cease to function

#### The Negative Consequences of Information Costs

##### Adverse Selection:

Lenders can't distinguish good from bad credit risks, which discourages transactions from taking place.

##### Solutions include

- Government-required information disclosure
- Private collection of information
- The pledging of collateral to insure lenders against the borrower's default
- Requiring borrowers to invest substantial resources of their own

##### **2. Moral Hazard:**

Lenders can't tell whether borrowers will do what they claim they will do with the borrowed resources; borrowers may take too many risks.

##### Solutions include

- Forced reporting of managers to owners
- Requiring managers to invest substantial resources of their own
- Covenants that restrict what borrowers can do with borrowed funds

### Question No: 30 ( Marks: 3 )

---

**Discuss briefly the facts about term Structure.**

#### Term Structure facts

The relationship among bonds with the same risk characteristics but different maturities is called the term structure of interest rates.

- A plot of the term structure, with the yield to maturity on the vertical axis and the time to maturity on the horizontal axis, is called the yield curve

**OR**

Relationship between interest rates on bonds of different maturities, usually depicted in the form of a graph often called a yield curve. Harvey shows that inverted term structures (long rates below short rates) have preceded every recession over the past 30 years

### Question No: 31 ( Marks: 5 )

---

You are the founder of an automobile company. Describe the idiosyncratic & systematic risks that your company faces.

## Subjective Solved By

TAKE IDEA FROM DEF OF THIS Q SO U CAN MAKE ITS ANS

### **WHAT IS IDIOSYNCRATIC RISK:**

Unsystematic risk or risk that is uncorrelated to the overall market risk. In other words, the risk that is firm specific and can be diversified through holding a portfolio of stocks

OR

The risk of price change due to the unique circumstances of a specific security, as opposed to the overall market. This risk can be virtually eliminated from a portfolio through diversification. **also called**. Unsystematic risk Or idiosyncratic risk.

### **WHAT IS SYSTEMATIC RISKS:**

The risk inherent to the entire market or entire market segment

Also known as "un-diversifiable risk" or "market risk."

Systematic risks affect everyone

OR

Systematic risk also known as systemic risk, market risk and un-diversifiable risk is risk which applies to whole market or market segment. It is opposite to idiosyncratic risk which applies to specific stocks or other financial products. Often systematic risk results in declining of total portfolio investment value as all/most portfolio investments declines in value.

### **Question No: 32 ( Marks: 5 )**

---

Discuss bubbles in your own word.

Bubbles are persistent and expanding gaps between actual stock prices and those warranted by the fundamentals.

- These bubbles inevitably burst, creating crashes.
- They affect all of us because they distort the economic decisions companies and consumers make
- If bubbles result in real investment that is both excessive and inefficiently distributed, crashes do the opposite; the shift to excessive pessimism causes a collapse in investment and economic growth
- When bubbles grow large enough and result in crashes the stock market can destabilize the real economy

### **Question No: 41 ( Marks: 10 )**

---

What are five core principles of financial system? Discuss it in detail.

Answer:

## Subjective Solved By

### **Financial System:**

In finance, the financial system is the system that allows the transfer of money between savers and borrowers.

### **Five Core Principles of the Financial System & Details:**

According to Mr. Brown, five core principles of Financial System, as outlined below:

- 1) **First**, transparency means bringing the so-called 'shadow banking system' into the regulatory system, not operating parallel to it. And across the world, financial institutions need to be supervised not on what name they give themselves - be it banks, hedge funds or investment funds - but on what they do. We also need to ensure that all jurisdictions - such as offshore havens - and all important markets are covered by global supervision.
- 2) **Second** accountability means boardroom integrity, where boards of directors must understand and be held responsible for the risks they undertake. And credit rating agencies need to be free of conflicts of interest and be properly licensed.
- 3) **Third**, responsible risk taking means an end to the excesses from short-termism; instead rewarding people for long term success not short term deals. But to be most effective it has to be done internationally. A race to the bottom is in no one's interest. So we should agree a new international approach to pay and bonus structures.
- 4) **The fourth** principle of prudential regulation means taking into account the effect of a bank's capital, liquidity, solvency and conduct on the whole financial system.
- 5) **Finally**, he stated: "Lastly, international co-operation lies at the heart of all our changes - recognizing that financial institutions that work across borders need to be under cross border supervision too and regulators in one country must co-operate far more closely with regulators in other countries to create a global network of regulation that captures the risks to us all.

Other Principles of Financial are below:

- a. **Facilitate Payments**
- b. **Channel Funds from Savers to Borrowers**
- c. **Enable Risk Sharing**

## Subjective Solved By

### Question No: 41 ( Marks: 10 )

---

“A financial instrument is a real or virtual document representing a legal agreement involving some sort of monetary value.” Discuss further on financial instruments by giving examples. Point out some of its uses and important characteristics.

**ANSWER: Financial Instrument:** Financial instrument is a written obligation of one party to transfer something of value to another party at a future date under certain conditions.

- By written obligation we mean that it is enforced by the government and this obligation is an important feature of a financial instrument.
- The party here can be an individual, company or a government
- Future date can be specified or when some event occurs.

**Examples:** Stocks, bonds, insurance etc are examples of financial instruments.

**Characteristics of Financial Instruments:** There are certain characteristics of financial instruments.

1. **Standardization:** It is a standardized agreement which enables reduction in costs of complexity. So because of this most financial instruments today are similar.
2. **Communicate Information:** Provide certain important information about the issuer which otherwise would have been difficult to gather for the lenders.

**Value of Financial Instruments:** The value of financial instruments depends on various factors.

- **Size:** Larger the promised payment more valuable is the financial instrument.
- **Timing:** The sooner the payment is made increases the value of financial instrument.
- **Risk:** A financial instrument is more valuable if there are greater possibilities that payment will be made.
- **Circumstances:** Payments made when needed the most makes the financial instrument more valuable.

**Uses of Financial Instruments:**

- **Store Of Value:**

**Stocks:** The stock holder is a part owner of the firm and receives part of its profits.

**Bonds:** A form of loan which promises to make repayment in future dates.

**Bank loans:** Borrowers obtains resources from lenders in exchange of promised payments.

- **Transfer of Risk:**

**Insurance:** Takes premium to assure payment under particular conditions (accident, death etc)

**Future contracts:** It is an agreement to exchange fixed quantity of a commodity or an asset at a fixed price. Transfer risk of price fluctuations.

**Options:** Gives holder the right to purchase fixed quantity of an underlying asset at predetermined price within

## Subjective Solved By

### Question No: 41 ( Marks: 10 )

Sort out M1, M2 and M3 from the list below and calculate total value of M1, M2 and M3.

| The Monetary Aggregates  |  |
|--|--|
| Monetary Aggregates  | Value as of August 2004 (U.S.\$ billion) |
| + Repurchase agreements <b>M3</b>                                    | 516.6                                    |
| + Savings deposits including money market deposit accounts <b>M2</b> | 3415.3                                   |
| + Other checkable deposits <b>M1</b>                                 | 328.5                                    |
| + Retail money market mutual fund shares <b>M2</b>                   | 735.5                                    |
| + Eurodollars <b>M3</b>  | 344.5                                    |
| + Small-denomination time deposits <b>M2</b>                         | 794.7                                    |
| + Demand deposits <b>M1</b>  | 315.3                                    |
| + Large-denomination time deposits <b>M3</b>                         | 1,036.3                                  |
| + Traveler's checks <b>M1</b>  | 7.6                                      |
| + Currency in the hands of the public <b>M1</b>                      | 686.2                                    |
| + Institutional money market mutual fund shares <b>M3</b>            | 1,104.7                                  |

$$M1=328.5+315.3+7.6+686.2$$

$$M1=1337.6$$

$$M2=M1+3415.3+735.3+794.7$$

$$M2=1337.6+4945.3$$

$$M2=6282.9$$

$$M3=m1+m2+516.6+1036.3+1104.7+344.5$$

$$M3=1337.6+4945.3+3002.1$$

$$M3=9285$$

### Question No: 39 ( Marks: 3 )

How Financial System promotes economic efficiency? List down points.ple.

1. They provide the channel for transfer of funds between saver and borrowers
2. provide risk sharing like insurance
3. provide payments like bank accounts
4. Help those people which do not have enough capital to use profitable opportunity.

### Question No: 40 ( Marks: 3 )

Briefly discuss different types of speculative grades of Long term ratings be PACRA.

## Subjective Solved By

Speculative grade means there are possibility of credit risk.  
Pacra has B class rating for them

**BB** shows that there is a possibility of credit risk in making.  
**B** Highly speculative in nature. 'B' it shows that that significant credit risk is there, but a limited margin of safety remains.  
**CCC, C,CC** High default risk. Chances of default is a real possibility

### Question No: 39 ( Marks: 3 )

Briefly discuss different types of investment grades of Long term ratings be  
PACRA  
PACRA

is the Pakistan Credit rating agency which rates different companies in Pakistan who offer bonds or stocks to investors. They rate companies independently to protect investors from companies who might default and not pay the investors. Based on their ratings given to different companies people who want to invest will know which companies to go for investment and which to avoid.

#### Long Term Ratings by PACRA

##### Investment Grades:

- AAA:** Highest credit quality. 'AAA' ratings denote the lowest expectation of credit risk.
- AA:** Very high credit quality. 'AA' ratings denote a very low expectation of credit risk.
- A:** High credit quality. 'A' ratings denote a low expectation of credit risk.
- BBB:** Good credit quality. 'BBB' ratings indicate that there is currently a low expectation of credit risk.

### Question No: 41 ( Marks: 5 )

"People differ in their opinions of how stocks should be valued". Discuss it.  
Chartists believe that they can predict changes in a stock's price by looking at patterns in its past price movements

- Behaviorists estimate the value of stocks based on their perceptions of investor psychology and Behavior
- others estimate stock values based on a detailed study of the fundamentals, which can be analyzed by examining the firm's financial statements.
- In this view the value of a firm's stock depends both on its current assets and estimates of its future profitability
- The fundamental value of stocks can be found by using the present value formula to assess how much the promised payments are worth, and then adjusting to allow for risk
- Chartists and Behavior lists focus instead on estimates of the deviation of stock prices from those fundamental values

## Subjective Solved By

### Question No: 30 ( Marks: 3 )

---

“Financial intermediary reduce costs”. How?

**Financial intermediary** is naturally an foundations that make easy the control of funds between lenders and borrowers not directly that acts as the middle man between investors and firms raising fund is called financial intermediary.

Financial intermediary will reduce transaction cost because they are specializing in the issuance of standardized securities.

### Question No: 31 ( Marks: 5 )

---

Define financial intermediaries. What functions the financial intermediaries performs regarding savings?

**Answer: Financial intermediary** is naturally an foundations that make easy the control of funds between lenders and borrowers not directly that acts as the middle man between investors and firms raising fund is called financial intermediary.

Financial intermediary will reduce transaction cost because they are specializing in the issuance of standardized securities

#### 1. **Maturity transformation**

Converting short-term liabilities to long term assets just like banks deal with large number of lenders and borrowers, and settle their conflicting needs

#### 2. **Risk transformation**

Converting risky investments into relatively risk-free ones For example ending to multiple borrowers to spread the risk

#### 3. **Convenience**

Matching small deposits with large loans and large deposits with small loans

### Question No: 32 ( Marks: 5 )

---

Briefly explain the factors which shift the bond demand.

Answer: Factors that shift Bond Demand

- **Expected inflation**

If **expected inflation fall** then demand for bond increases, curve of bond demand shift to right.

- **Expected return on bonds**

If the expected return on bonds rise then people will invest money more ,as result demand for bond will rise

- **Risk relative to alternatives**

If other stocks are more risky then demand for bonds increases then shift the demand curve bond

- **Liquidity of bonds**

If liquidity of bonds becomes more than other stocks or investments then shift the demand curve bond

- **Wealth**

As the consumer received more wealth their demands for good raise. They will invest

## Subjective Solved By

their money in market result will be economy grows and bond prices will increase.