UNIT END QUESTIONS

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING (AUTONOMOUS)
L.B. Reddy Nagar: Mylavaram – 521 230: Krishna Dist.

CODE- :- 20MB14
SUBJECT NAME: Security Analysis & Portfolio Management

<table>
<tr><td>1</td><td>Define investment? Explain the investment process with a neat diagram.</td></tr>
<tr><td>2</td><td>What are the investor's objectives in investing his funds in the stock market</td></tr>
<tr><td>3</td><td>What is listing of shares? Describe the advantages provided for listing. What documents should be filled for listing of shares</td></tr>
<tr><td>4</td><td>Enumerate the various types of orders.</td></tr>
<tr><td>5</td><td>List out the differences between the primary market and the secondary market</td></tr>
<tr><td>6</td><td>Write a short notes on
• Depositories
• Clearing house</td></tr>
<tr><td>7</td><td>What are the various form of investment alternatives? Give a detailed account of any five.</td></tr>
<tr><td>8</td><td>The expected rates of return and the possibilities of their occurrence for alpha company and Beta company scrips are given below.
<table>
<tr><th>Probability of Occurrence</th><th>Return on Alpha's Scrip</th><th>Return on Beta's Scrip</th></tr>
<tr><td>0.05</td><td>-2.0</td><td>-3.0</td></tr>
<tr><td>0.20</td><td>9.0</td><td>6.0</td></tr>
<tr><td>0.50</td><td>12.0</td><td>11.0</td></tr>
<tr><td>0.20</td><td>15.0</td><td>14.0</td></tr>
<tr><td>0.05</td><td>26.0</td><td>19.0</td></tr>
</table>
• If investor invests equally in both the scrip's then what would be the return to the investor.
• Calculate covariance and coefficient of correlation A.</td></tr>
<tr><td>9</td><td>An investor has choose from 2 securities .the following are their rates of return and probabilities
<table>
<tr><td colspan="2">Q</td><td colspan="2">P</td></tr>
<tr><td>Return %</td><td>probability</td><td>Return %</td><td>probability</td></tr>
<tr><td>20</td><td>0.1</td><td>13</td><td>0.1</td></tr>
<tr><td>16</td><td>0.4</td><td>16</td><td>0.2</td></tr>
<tr><td>10</td><td>0.3</td><td>22</td><td>0.3</td></tr>
<tr><td>3</td><td>0.2</td><td>25</td><td>0.4</td></tr>
</table>
Which is the better security Q or P?</td></tr>
<tr><td>10</td><td>Define Risk. What are the different types of risk influences on investment?</td></tr>
<tr><td>11</td><td>What is the expected return to a portfolio composed of the following securities?
<table>
<tr><td>Security</td><td>Expected return %</td><td>Proportion %</td></tr>
<tr><td>1</td><td>10</td><td>20</td></tr>
<tr><td>2</td><td>15</td><td>20</td></tr>
<tr><td>3</td><td>20</td><td>60</td></tr>
</table></td></tr>
</table>

<table>
<tr><td></td><td>What would be the expected return if proportion of each security in the portfolio were 25, 25, and 50% respectively?</td></tr>
<tr><td>12</td><td>Investment and speculation are somewhat different and yet similar in certain respect. Explain</td></tr>
<tr><td>13</td><td>Explain the different types of investment alternatives available for a common investor with moderate risk taking capabilities?</td></tr>
<tr><td>14</td><td>Distinguish between
● Real and financial assets
● Investment and arbitrage</td></tr>
<tr><td>15</td><td>Define financial market. Explain functions of financial markets.</td></tr>
<tr><td>16</td><td>What are the financial markets? Explain different types of financial markets.</td></tr>
<tr><td>17</td><td>Explain any 5 types of financial instruments.</td></tr>
<tr><td>18</td><td>Write notes on:
● Interest rate risk
● Market risk
● Purchasing power risk</td></tr>
<tr><td>19</td><td>Explain the concept of systematic risk. Why it is called systematic risk?</td></tr>
<tr><td>20.</td><td>CASE STUDY
The market price of a share A is Rs155 following information is available about market condition, dividends and market price after one year(year-end).find the expected return of the share and variability of the return.
<table>
<tr><td>Market condition</td><td>Probability</td><td>Market price</td><td>Dividend(A)</td></tr>
<tr><td>Bullish</td><td>0.25</td><td>200</td><td>15</td></tr>
<tr><td>Stable</td><td>0.50</td><td>160</td><td>10</td></tr>
<tr><td>Bearish</td><td>0.25</td><td>150</td><td>5</td></tr>
</table></td></tr>
<tr><td></td><td>UNIT-2</td></tr>
<tr><td>1(a)</td><td>What are the various assumptions of CAPM model? Explain the concept of CAPM.</td></tr>
<tr><td>(b)</td><td>Distinguish between CAPM and Arbitrage pricing theory</td></tr>
<tr><td>2</td><td>Ashok wants to buy watchful company’s stock hold on it for five years. He is estimated that ₹ 3.34 dividend would be paid by the company continuously for the next five years. He hopes to sell the shares at ₹ 60 at the end of the fifth year, what is the present price? His required rate of return is 10%</td></tr>
<tr><td>3</td><td>Explain the concept OF Bond Management? Explain about active bond management and passive bond management.</td></tr>
<tr><td>4</td><td>Explain the concept of bond convexity with graphical representation</td></tr>
<tr><td>5</td><td>Calculate the duration of the bond A and bond B with 8% and 9% coupons having maturity period of 4 years. The face value is Rs. 1000. Both the bonds are currently yielding 7%.</td></tr>
<tr><td>6</td><td>Raju is considering the purchase of a bond currently selling at Rs. 878.50. The bond has four years to maturity, face value of Rs. 1000 and 8% coupon rate. The next annual interest payment is due after one year from today. The required rate of return is 10%.
i. Calculate the intrinsic value of the bond. Should Raju buy the bond?
ii. Calculate the yield to maturity.</td></tr>
</table>

7(a)	Define yield to maturity. A five year bond with 8% coupon rate and maturity value of Rs. 1000 is currently selling at Rs. 856. Calculate its yield to maturity.
(b)	Draw SML line when beta is 1, 1.1 and 1.2. Where Rp = 8% and Rf = 7%.
8(a)	Discuss the role of P/E ratio in making the sell and buy decision.
(b)	ABC Ltd.is currently paying dividend of Rs 1 and it is expected to grow at 7% p.a .infinitely. what is the value if: i) The equity capitalization rate is 15% ii) The equity capitalization rate is 16% iii) The growth rate is 8% and instead of 7%, and iv) The equity capitalization rate is 16% and the growth rate is 4%.
9	Fashions Ltd., operates a large readymade garments system in the textile industry. Assume that its common stock can be purchased in the beginning of 1997 at ₹ 40.The dividend per share would be ₹ 2 for the next three years. It is estimated that at the end of 2000 the stock will be sold for ₹ 55. What is the rate of return Fashion's stock?
10	For the first four years XYZ firm is assumed to grow at a rate of 10%. After four years the growth rate of dividend is assumed to decline linearly to 6 %. After 7 years, the firm is assumed to grow at a rate of 6% infinitely. The next year dividend is ₹ 2 and the required rate of return is 14%. Find out the value of the stock.
11	According to the financial express report, October 2013 the rate of return of NGM stock for the past five years is 18.58%. This is assumed to continue for the next five years and after that rate of return is assumed to have a growth rate of 10 % indefinitely. The dividend paid for the year 2012-13 was Rs 1.8 The required rate of return is 20%. The price is Rs. 14 on 14.10.2013. Estimate the price according to the two stage model.
12	Find out the value of a share. Equity share capital face value Rs 1.00 each 50,00,000 Reserves 10,00,000 20% secured loans 10,00,000 Fixed assets 50,00,000 Investments 5,00,000 Operating profits 30,00,000 Tax rate 30% P/E ratio 14%
13	The Grace & co has a common share outstanding in the market with price earnings ratio of 15. The annual expected growth in earnings, dividends and price is 7%.the earnings per share is Rs 2.5, the dividend pay-out is 60% and the investor wants to hold the stock for 4 years. The required rate of return is 15%.what would be the present value?
14(a)	Distinguish between Security market line and capital market line
(b)	A security has a standard deviation of 3.2 .the correlation coefficient of the security with the market is 1.2 and market standard deviation is 2.4. The return from government securities is 15% and from the market portfolio is 20%.what is the required rate of return of the security?
15	Write a short notes on: • Coupon rate • Yield to call • Zero coupon bond
16	Define Bond. Explain its features.

<table>
<tr><td>17</td><td>Distinguish between bonds and debentures.</td></tr>
<tr><td>18</td><td>Write a short notes on
● Bond convexity
● Bond immunization</td></tr>
<tr><td>19</td><td>Explain the following terms
● P/E ratio
● Price/book value
● Price/ sales ratio
● Economic value added (EVA)</td></tr>
<tr><td>20</td><td>CASE STUDY
If the market price of the bond increases, the yield would decline and vice versa.

<table><tr><th>Example</th><th>Bond A</th><th>Bond B</th></tr><tr><td>Par Value</td><td>Rs. 1000</td><td>Rs. 1000</td></tr><tr><td>Coupon rate</td><td>10%</td><td>10%</td></tr><tr><td>Maturity period</td><td>2 years</td><td>2 years</td></tr><tr><td>Market price</td><td>Rs. 874. 75</td><td>Rs. 1035. 66</td></tr></table>● Calculate the yield value.
● Check whether the above statement is correct or not.</td></tr>
<tr><td></td><td>UNIT-3</td></tr>
<tr><td>1</td><td>What is fundamental analysis? How does fundamental analysis differ from technical analysis?</td></tr>
<tr><td>2</td><td>What is SWOT analysis? Carry out SWOT analysis for any industry of your choice.</td></tr>
<tr><td>3</td><td>“Industry life cycle exhibits the status of the industry and gives the clue to entry and exit for investors” Elucidate.</td></tr>
<tr><td>4</td><td>What is EIC analysis? Discuss in detail.</td></tr>
<tr><td>5</td><td>Discuss about the major factors that are to be considered in Economy analysis</td></tr>
<tr><td>6</td><td>Discuss about the major factors that are to be considered in Industry analysis.</td></tr>
<tr><td>7</td><td>Describe the significance of technical analysis in the electronic based trading system. What are the most common trading techniques used in technical analysis.</td></tr>
<tr><td>8</td><td>Explain in detail the Dow Theory and how it is used to determine the direction of stock market?</td></tr>
<tr><td>9</td><td>Can stock prices have a support level and resistance level? If so, explain.</td></tr>
<tr><td>10</td><td>“The Elliot wave theory is based on the principle that action is allowed by reaction.” Elucidate.</td></tr>
<tr><td>11</td><td>What are price charts? Describe the different types of price charts used by technical analysts.</td></tr>
<tr><td>12</td><td>Write a short notes on
● ROC
● RSI</td></tr>
<tr><td>13</td><td>Write a short notes on
● Breadth of the market
● Moving averages</td></tr>
<tr><td>14</td><td>Describe the chart patterns that help to identify trend reversal.</td></tr>
<tr><td>15</td><td>Discuss about the major factors that are to be considered in company analysis.</td></tr>
</table>

<table>
<tr><td>16</td><td>“An investor cannot consistently earn excess return by undertaking fundamental analysis or technical analysis. ’Discuss.</td></tr>
<tr><td>17</td><td>Distinguish between
● Dividend and yield.
● Market value and book value of share.</td></tr>
<tr><td>18</td><td>Is intrinsic value of a share important? How would you calculate it?</td></tr>
<tr><td>19</td><td>How is a fundamental analysis useful to a prospective investor?</td></tr>
<tr><td>20</td><td>Case study
A company has a profit after tax @30% Rs 3, 30,000. The market price of the equity share is Rs 95.it has paid dividend to equity share holders @15%. The capital structure of the company comprises of 80,000 equity share of Rs 10 each
Analyse
● Dividend yield on equity
● Earing for equity share
● Price earnings ratio
● Cover for equity dividend</td></tr>
<tr><td></td><td>UNIT-4</td></tr>
<tr><td>1</td><td>Explain the traditional approach of portfolio construction.</td></tr>
<tr><td>2</td><td>What is Portfolio management? Describe the different phases in portfolio management.</td></tr>
<tr><td>3</td><td>What is a portfolio? Discuss about the pros and cons of diversifying a portfolio.</td></tr>
<tr><td>4</td><td>Define Markowitz diversification. Explain the statistical method used by Markowitz to obtain the risk reducing benefit?</td></tr>
<tr><td>5</td><td>Mr. Arul got the following information regarding his favourite stocks. He wants to invest in all the four stocks equally.
<table>
<tr><th>Stock</th><th>A</th><th>β</th><th>σ_{ei}^2</th></tr>
<tr><td>1</td><td>1.27</td><td>1.50</td><td>50</td></tr>
<tr><td>2</td><td>1.02</td><td>1.05</td><td>40</td></tr>
<tr><td>3</td><td>2.48</td><td>1.37</td><td>20</td></tr>
<tr><td>4</td><td>0.47</td><td>0.86</td><td>35</td></tr>
</table>
The market variance is 25. The markets expected return is 20%.what would be Arul’s portfolio return and risk?</td></tr>
<tr><td>5</td><td>In a portfolio there are three securities A, B and C. A is positively correlated with index, B is negatively correlated with index and there is no correlation between C and the market. Give your comments and represent the three cases with line graphs and interpret.</td></tr>
<tr><td>6</td><td>What is simple diversification? Will it reduce total risk? Will it reduce unsystematic risk?</td></tr>
<tr><td>7</td><td>An investor wants to build a portfolio with the following four stocks. With the given details, find out his portfolio return and portfolio variance. The investment is spread equally over the stocks.
<table>
<tr><td>Company</td><td>A</td><td>B</td><td>Residual variance</td></tr>
<tr><td>Sneha</td><td>0.17</td><td>0.93</td><td>45.15</td></tr>
<tr><td>Neha</td><td>2.48</td><td>1.37</td><td>132.25</td></tr>
<tr><td>Asha</td><td>1.47</td><td>1.73</td><td>196.28</td></tr>
<tr><td>Priya</td><td>2.52</td><td>1.17</td><td>51.98</td></tr>
</table>
Market return ($R_{m)}$ =11</td></tr>
</table>

<table>
<tr><td></td><td>Market return variance =26</td></tr>
<tr><td>8</td><td>A pensioner decides to invest Rs. 10 lakhs in stock market. The Treasury bill rate is 5% and the market variance is 10. The following table gives the details regarding the expected return, beta and residual variance of the individual security. What is the optimum portfolio assuming no short sales?
<table>
<tr><th>Security</th><th>Expected Return</th><th>β</th><th>σ_{ei}^2</th></tr>
<tr><td>A</td><td>15</td><td>1.0</td><td>30</td></tr>
<tr><td>B</td><td>12</td><td>1.5</td><td>20</td></tr>
<tr><td>C</td><td>11</td><td>2.0</td><td>40</td></tr>
<tr><td>D</td><td>8</td><td>0.8</td><td>10</td></tr>
<tr><td>E</td><td>9</td><td>1.0</td><td>20</td></tr>
<tr><td>F</td><td>14</td><td>1.5</td><td>10</td></tr>
</table></td></tr>
<tr><td>9</td><td>Differentiate portfolio rebalancing and portfolio up gradation.</td></tr>
<tr><td>10</td><td>The following table gives data on four stocks.
<table>
<tr><td>Stock</td><td>Alpha</td><td>Variance systematic</td><td>Unsystematic</td></tr>
<tr><td>A</td><td>-0.06</td><td>5</td><td>4</td></tr>
<tr><td>B</td><td>0.1</td><td>2</td><td>6</td></tr>
<tr><td>C</td><td>0.0</td><td>3</td><td>1</td></tr>
<tr><td>D</td><td>-0.14</td><td>3</td><td>2</td></tr>
</table>
The market is expected to have a 12% return over a forward period with a return variance of 6%.calculate the expected return for a portfolio consisting of equal portion of stocks A, B, C, and D</td></tr>
<tr><td>11</td><td>Stocks L and M have yielded the following returns for the past two years.
<table>
<tr><td>Years</td><td colspan="2">Returns (%)</td></tr>
<tr><td></td><td>L</td><td>M</td></tr>
<tr><td>2014</td><td>12</td><td>14</td></tr>
<tr><td>2015</td><td>18</td><td>12</td></tr>
</table>
i. What is the expected return on portfolio made up of 60% of L and 40% of M?
ii. find out standard deviation of each stock
iii. What is the covariance and co-efficient of correlation between stock L and M?</td></tr>
<tr><td>12</td><td>How would you calculate the systematic, unsystematic risk of security and the portfolio risk?</td></tr>
<tr><td>13</td><td>Consider two securities, P and Q with expected returns of 15% and 24% respectively, and standard deviation of 35% and 52% respectively. Calculate the standard deviation of a portfolio weighted equally between the two securities if their correlation is -0.09</td></tr>
<tr><td>14</td><td>The historical rates of return of two securities over the past ten years are given. Calculate the covariance and the correlation of the two securities
<table>
<tr><td>year</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr>
<tr><td>security 1</td><td>12</td><td>8</td><td>7</td><td>14</td><td>16</td><td>15</td><td>18</td><td>20</td><td>16</td><td>22</td></tr>
<tr><td>security 2</td><td>20</td><td>22</td><td>24</td><td>18</td><td>15</td><td>20</td><td>24</td><td>25</td><td>22</td><td>20</td></tr>
</table></td></tr>
</table>

<table>
<tr><td></td><td></td></tr>
<tr><td>15</td><td>What are the formula plans? How do they help in portfolio revision?</td></tr>
<tr><td>16</td><td>How is a constant Rupee Value plan different to a constant ratio plan? Discuss</td></tr>
<tr><td>17</td><td>A financial analyst is analysing two investment alternatives of Z and Y . the estimated rates of return and their chances of occurrence for the next year are given in table below
<table>
<tr><td>Probability of occurrence</td><td>Rates of return Z</td><td>Rates of return Y</td></tr>
<tr><td>0.20</td><td>22%</td><td>5%</td></tr>
<tr><td>0.60</td><td>14%</td><td>15%</td></tr>
<tr><td>0.20</td><td>-4%</td><td>25%</td></tr>
</table>

Determine each alternatives expected rate of return, variance and standard deviation
Is Y comparatively riskless?
If the financial analyst wishes to invest half in Z and another half in Y, would it reduce risk? Explain the reason for it
</td></tr>
<tr><td>18</td><td>Explain Sharpe’s optimal portfolio. How to construction of the optimal portfolio?</td></tr>
<tr><td>19</td><td>Explain the Sharpe index model? How does it differ from the Markowitz model?</td></tr>
<tr><td>20</td><td>Case study
Anand is considering the purchase of three securities A, B, C for the next year. The returns of securities depend on next year’s state of the stock market. The estimated rates of return are shown in the table.
<table>
<tr><td rowspan="2">State of market</td><td rowspan="2">Probability of occurrence</td><td colspan="3">Rates of return of securities</td></tr>
<tr><td>A</td><td>B</td><td>C</td></tr>
<tr><td>Recession</td><td>0.25</td><td>10%</td><td>9%</td><td>14%</td></tr>
<tr><td>Average</td><td>0.50</td><td>14%</td><td>13%</td><td>12%</td></tr>
<tr><td>Boom</td><td>0.25</td><td>16%</td><td>18%</td><td>10%</td></tr>
</table>

Find each stock’s expected rate of return and standard deviation and co-efficient of variance
Apply mean, variance criterion to the alternative investment
If Anand invest one third on each security what would be his portfolio return?
What are covariance between security A and B, Band C, A and C
If equal amount of funds are invested in these securities, what will be portfolio risk?
</td></tr>
</table>

UNIT-5

1	Define in your own words about the mutual fund? Explain the pros and cons of mutual funds.
2	Explain the performance evaluation procedure of the mutual funds
3	What are the various types of mutual fund? Discuss briefly about them.
4	The returns obtained from mutual fund gives satisfaction only when the market is booming. Give your comments.
5	The following three portfolios provide the particulars given below

<table>
<tr><td></td><td>
<table>
<tr><th>Portfolio</th><th>Average annual return</th><th>Standard deviation</th><th>Correlation co-efficient</th></tr>
<tr><td>A</td><td>18</td><td>27</td><td>0.8</td></tr>
<tr><td>B</td><td>14</td><td>18</td><td>0.6</td></tr>
<tr><td>C</td><td>15</td><td>8</td><td>0.9</td></tr>
<tr><td>MARKET</td><td>13</td><td>12</td><td>----</td></tr>
</table>
Risk free rate of interest is 9
Rank this portfolio's using Sharpe's and Trenyor's methods.
</td></tr>
<tr><td>6</td><td>Discuss about the organization and management of mutual funds</td></tr>
<tr><td>7</td><td>Define mutual fund? How many types are there? Explain</td></tr>
<tr><td>8</td><td>List out various types of mutual funds and discuss about their pros and cons individually.</td></tr>
<tr><td>9</td><td>What is a mutual fund? What are the objectives of mutual funds? Do they match with the objectives of the investors who are not risk averse?</td></tr>
<tr><td>10</td><td>Briefly explain the history of mutual funds</td></tr>
<tr><td>11</td><td>Write a notes on
Sharpe's performance measure
Treynor's ideal fund
Jensen's model</td></tr>
<tr><td>12</td><td>Calculate Net Assets Value of a mutual fund when the following information is provided
<table>
<tr><td>Cash balance</td><td>4,00,000</td></tr>
<tr><td>Bank balance</td><td>2,00,000</td></tr>
<tr><td>Bonds (realizable value equity shared)</td><td>10,00,000</td></tr>
<tr><td>Equity shares (realizable value)</td><td>10,00,000</td></tr>
<tr><td>Expenses</td><td>1,00,000</td></tr>
<tr><td>No.of units outstanding</td><td>2,00,000</td></tr>
</table></td></tr>
<tr><td>13</td><td>A mutual fund has an NAV of ₹ 10.60 in the beginning and ₹ 10.90 at the end of the period .calculate the return of the mutual fund.</td></tr>
<tr><td>14</td><td>Mr.X has been owing units from three different mutual funds namely R, S, and T.The following particulars are available to him. He wants to dispose any one of the mutual fund for his personal expenditure. Which fund should he dispose
<table>
<tr><th>Fund</th><th>Excess average returns</th><th>Beta</th></tr>
<tr><td>R</td><td>7.7</td><td>1.02</td></tr>
<tr><td>S</td><td>11.3</td><td>0.99</td></tr>
<tr><td>T</td><td>11.6</td><td>1.07</td></tr>
<tr><td>Market</td><td>7.8</td><td>1.00</td></tr>
</table></td></tr>
<tr><td>15</td><td>Mr.Anand is having units in a mutual fund for the past three years. He wants to evaluate its performance by comparing it to the market
<table>
<tr><th></th><th>FUND</th><th>Market</th></tr>
<tr><td>Return</td><td>70.60</td><td>41.40</td></tr>
<tr><td>Standard deviation</td><td>41.31</td><td>19.44</td></tr>
<tr><td>Risk free rate</td><td>2%</td><td>2</td></tr>
<tr><td>β</td><td>1.12</td><td>----</td></tr>
</table></td></tr>
</table>

<table>
<tr><td>16</td><td>What is differential return? Explain how Jensen ratio measures the differential return of a portfolio.</td></tr>
<tr><td>17</td><td>Distinguish between Open –Ended and Close-Ended schemes</td></tr>
<tr><td>18</td><td>Explain problems and prospects of mutual funds in India</td></tr>
<tr><td>19</td><td>Define Portfolios Evaluation. Explain need for portfolio evaluation.</td></tr>
<tr><td>20</td><td>Case study:
You are given the following historical performance information on the capital market and a mutual fund

<table>
<tr><th>Year</th><th>Mutual fund beta</th><th>Mutual fund return (%)</th><th>Return on market index (%)</th><th>Return on Govt.securities (%)</th></tr>
<tr><td>1</td><td>0.90</td><td>-3.00</td><td>-8.50</td><td>6.50</td></tr>
<tr><td>2</td><td>0.95</td><td>1.50</td><td>4.00</td><td>6.50</td></tr>
<tr><td>3</td><td>0.95</td><td>18.00</td><td>14.00</td><td>6.00</td></tr>
<tr><td>4</td><td>1.00</td><td>22.00</td><td>18.50</td><td>6.00</td></tr>
<tr><td>5</td><td>1.00</td><td>10.00</td><td>5.70</td><td>5.75</td></tr>
<tr><td>6</td><td>0.90</td><td>7.00</td><td>1.20</td><td>5.75</td></tr>
<tr><td>7</td><td>0.80</td><td>18.00</td><td>16.00</td><td>6.00</td></tr>
<tr><td>8</td><td>0.75</td><td>24.00</td><td>18.00</td><td>5.50</td></tr>
<tr><td>9</td><td>0.75</td><td>15.00</td><td>10.00</td><td>5.50</td></tr>
<tr><td>10</td><td>0.70</td><td>-2.00</td><td>8.00</td><td>6.00</td></tr>
</table>

Calculate the following risk adjusted return measures for the mutual fund:
● Reward-to-variability ratio
● Reward –t0-volatility ratio
Comment on the mutual fund’s performance.</td></tr>
</table>