Seat No.: $\qquad$
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# GUJARAT TECHNOLOGICAL UNIVERSITY <br> MBA - SEMESTER (3) - EXAMINATION- SUMMER 2019 

## Subject Code: Security Analysis \& Portfolio Management <br> Subject Name: 3539223 <br> Time:02.30 PM TO 05.30 PM <br> Instructions: <br> 1. Attempt all questions. <br> 2. Make suitable assumptions wherever necessary. <br> 3. Figures to the right indicate full marks.

Date:10/05/2019

Total Marks: 70
Q. 1 Define following terms:

1. Settlement Period
2. Odd lot Trading
3. Support and Resistance Level
4. Systematic Risk
5. Head and shoulder pattern
6. Bond Duration
7. Holding period Return
Q. 2 "The investment process involves a series of activities starting from the policy
(A) formulation" Discuss the statement.
Q. 2 Stock $L$ and $M$ have yielded the following returns for the past two years.
(B)

| Year | Return \% |  |
| :---: | :---: | :---: |
|  | $\mathbf{L}$ | M |
| 1995 | 12 | 14 |
| 1996 | 18 | 12 |

A. What is the expected return on portfolio made up of $60 \%$ of L and $40 \%$ of M ?
B. Find out the standard deviation of each stock.
C. What is covariance and coefficient of correlation between stock L and stock M?

## OR

Q. 2 From the following information available of Vedanta Ltd. Calculate Beta value.
(B)

| Year | Return of Vedanta Ltd. | Return from Market |
| :---: | :---: | :---: |
| 1 | $-13 \%$ | $-3 \%$ |
| 2 | $5 \%$ | $2 \%$ |
| 3 | $15 \%$ | $8 \%$ |
| 4 | $27 \%$ | $12 \%$ |
| 5 | $10 \%$ | $7 \%$ |

Q. 3 Discuss the factors that Differentiate investor from speculator and gambler in $\mathbf{0 7}$
(A) detail.
Q. 3 Miss. Mona is considering an investment in the stock of PC Jewelers corporation.
(B) Miss. Mona expects PC Jewelers corporation to earn a return of $17 \%$ in the next year. PC Jewelers' beta is 1.3, T- bill rate is $7 \%$ and market return is $15 \%$. Should Miss. Mona invest in the PC Jewelers corporation

## OR

Q. 3 What do you mean by Fundamental Analysis? How does fundamental analysis $\mathbf{0 7}$
(A) differ from technical analysis?

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(B)

| Stocks | $\boldsymbol{\alpha}$ | $\boldsymbol{\beta}$ |
| :---: | :---: | :---: |
| A | 1.00 | 0.80 |
| B | 1.35 | 1.15 |
| C | 1.18 | 1.25 |
| D | 1.25 | 0.95 |
| E | 1.50 | 1.40 |

Rank the five stocks using Jenson's performance measure.
Q. 4 "Stocks are considered to be risky but bonds are not". Clarify that this is not fully
(A) correct.
Q. 4 Miss. Charmi considers Rs. 1000 par value bond bearing a coupon rate $11 \%$ that
(B) matures after 5 years. She wants minimum yield to maturity of $15 \%$. This bond is currently available at Rs. 870 . Should she buy the Bond?

## OR

Q. 4 What do you mean by portfolio return? Explain various types of Return in detail.
(A)
Q. 4 The following three portfolios of 'Mihir Investment House' provided bellow
(B) particulars;

| Portfolio | Avg. Annual <br> Return | Standard <br> Deviation | Correlation <br> coefficient |
| :---: | :---: | :---: | :---: |
| A | $18 \%$ | $27 \%$ | 0.8 |
| B | $14 \%$ | $18 \%$ | 0.6 |
| C | $15 \%$ | $8 \%$ | 0.9 |
| Market | $13 \%$ | $12 \%$ | -- |

Risk free rate of interest of 9\%. Rank these portfolios using sharpe Index and Treynor's Model.
Q. 5 Miss Nikita is constructing an optimal portfolio. The market return forecast says that it would be $13.5 \%$ for the next two year with the market variance of $10 \%$. The riskless rate of return is $5 \%$. The following securities are under review.

| Company | $\boldsymbol{\gamma}$ | $\boldsymbol{\beta}$ | Residual <br> variance |
| :---: | :---: | :---: | :---: |
| A | 3.72 | 0.99 | 9.35 |
| B | 0.60 | 1.27 | 5.92 |
| C | 0.41 | 0.96 | 9.79 |
| D | -0.22 | 1.21 | 5.39 |
| E | 0.45 | 0.75 | 4.52 |

Q. 5 What is the Cut Off point of Optimal Portfolio for Miss Nikita?
Q. 5 Find out the stocks for optimal portfolio and also create an optimal portfolio with
(B) the calculation of proportion of investment in each stocks selected for portfolio.

## OR

Q. 5 'Kinjal investment Avenues' assumes CAPM equilibrium model with unlimited borrowings and lending at the riskless rate of interest. Complete the blanks in the following table.

| Security | $\sum(\mathbf{R})$ | $\boldsymbol{\sigma}$ | $\boldsymbol{\beta}$ | Residual |
| :---: | :---: | :---: | :---: | :---: |
| A | 0.15 | -- | 2 | 0.10 |
| B | -- | 0.25 | 0.75 | 0.04 |
| C | 0.09 | -- | 0.50 | 0.17 |

 (A)
Q. 5 Calculate standard deviation of security A and security C . 07
(B)
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