

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

MBA – SEMESTER (3) – EXAMINATION– SUMMER 2019

**Subject Code: Security Analysis & Portfolio Management**

**Date: 10/05/2019**

**Subject Name: 3539223**

**Time: 02.30 PM TO 05.30 PM**

**Total Marks: 70**

**Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

**Q.1** Define following terms:

**14**

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 formulation” Discuss the statement. **07**

**Q.2** Stock L and M have yielded the following returns for the past two years. **07**  
**(B)**

| Year | Return % |    |
|------|----------|----|
|      | 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. **07**  
**(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 detail. **07**  
**(A)**

**Q.3** Miss. Mona is considering an investment in the stock of PC Jewelers corporation. **07**  
**(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 differ from technical analysis? **07**  
**(A)**

- Q.3** Alpha and beta coefficient details of the following stocks are as under; **07**  
**(B)**

| <b>Stocks</b> | <b><math>\alpha</math></b> | <b><math>\beta</math></b> |
|---------------|----------------------------|---------------------------|
| 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 Jensen's performance measure.

- Q.4** "Stocks are considered to be risky but bonds are not". Clarify that this is not fully **07**  
**(A)** correct.

- Q.4** Miss. Charmi considers Rs. 1000 par value bond bearing a coupon rate 11% that **07**  
**(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. **07**  
**(A)**

- Q.4** The following three portfolios of 'Mihir Investment House' provided bellow **07**  
**(B)** particulars;

| <b>Portfolio</b> | <b>Avg. Annual Return</b> | <b>Standard Deviation</b> | <b>Correlation coefficient</b> |
|------------------|---------------------------|---------------------------|--------------------------------|
| 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 **07**  
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.

| <b>Company</b> | <b><math>\alpha</math></b> | <b><math>\beta</math></b> | <b>Residual variance</b> |
|----------------|----------------------------|---------------------------|--------------------------|
| 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? **07**  
**(A)**

- Q.5** Find out the stocks for optimal portfolio and also create an optimal portfolio with **07**  
**(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 **07**  
borrowings and lending at the riskless rate of interest. Complete the blanks in the  
following table.

| <b>Security</b> | <b><math>\Sigma(R)</math></b> | <b><math>\sigma</math></b> | <b><math>\beta</math></b> | <b>Residual</b> |
|-----------------|-------------------------------|----------------------------|---------------------------|-----------------|
| A               | 0.15                          | --                         | 2                         | 0.10            |
| B               | --                            | 0.25                       | 0.75                      | 0.04            |
| C               | 0.09                          | --                         | 0.50                      | 0.17            |

- Q.5** Find out expected return of security B for 'Kinjal investment Avenues'. **07**  
**(A)**  
**Q.5** Calculate standard deviation of security A and security C. **07**  
**(B)**

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