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PARUL UNIVERSITY
FACULTY OF COMMERCE
M.Com (Hons) Winter 2017-18 Examination

Semester: III
Date: 6/12/17
Subject Code: 16201202
Subject Name: Security Analysis \& Portfolio Management
Time: 10.30 am To 1.00 pm
Total Marks: 60

## Instructions:

1. Attempt all questions as directed.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
Q. 1 (A) Select correct answer from the options given after the question (1 mark each)
4. Suppose you have 20 stocks and you want to derive efficient frontier, how many covariances do you have to calculate?
a. 120
b. 150
c. 190
d. 200
5. The main difference between real and nominal return proceeds is that
a. A real return adjust for inflation and nominal return does not
b. Real return use actual cash flows and nominal use expected cash flows
c. Real return adjust for commissions and nominal returns do not
d. Real returns show highest possible return and nominal show lowest possible return
6. Market risk is also called
a. non diversifiable and systematic risk
b. systematic and unique risk
c. Systematic and diversifiable risk
d. unique and non diversifiable risk
7. What is the expected return of an equally-weighted four-stock portfolio? The expected return of each stock is $10 \%, 18 \%, 7 \%$, and $23 \%$.
a. $12.5 \%$
b. $13.5 \%$
c. $14.5 \%$
d.15.5\%
8. The statistical tool used to measure a company's risk is
a. Mean
b. Variance
c. Mode
d. Co-variance
9. "Sell Reliance shares at Rs 800 ". This order is a
a. best rate order
b. limit order
c. . discretionary order
d. stop loss order
(B) Define the following terms (1 mark each)
10. Unsystematic Risk
11. Systematic Risk
12. Portfolio
13. Fundamental Analysis
14. Technical Analysis
15. Investment
Q. 2 Answer the following. (4 mark each.)
16. Define investment. Discuss the various marketable and non-marketable investment avenues available to investors.
17. What is risk? Explain different kind of risk associated with investments in detail.
18. Write a short note on Porter's Five Force Model.

## Q. 3 Answer the following. (6 mark each. Any Three out of Four)

1. Calculate the expected return and the standard deviation of returns for a stock having the following probability distribution of returns.

| Possible returns | Probability |
| :---: | :---: |
| -25 | 0.05 |
| -10 | 0.10 |
| 0 | 0.10 |
| 15 | 0.15 |
| 20 | 0.25 |
| 30 | 0.20 |
| 35 |  |

2. You are considering two assets with the following characteristics:

$$
\begin{aligned}
& \mathrm{R} 1=15, \sigma 1=10, \mathrm{~W} 1=0.5 \\
& \mathrm{R} 2=20, \sigma 2=20, \mathrm{~W} 2=0.5
\end{aligned}
$$

Compute the mean and standard deviation of two portfolios if $\mathrm{r}_{1,2}=0.30$ and -0.70 respectively. Plot the two portfolios on a risk-return graph and briefly explain the results. 3. Select an industry of your choice and do the industry analysis in the current economic scenario.
4. What is Macroeconomic Analysis? Discuss any three variables / indicators used to describe the state of economy.

## Q. 4 Answer the following. (9 mark each. Any Two out of Three)

1. Your portfolio consist of three stocks $\mathrm{A}, \mathrm{B}$, and C with the weight of $25 \%, 32 \%$ and $43 \%$ respectively with expected return of $18 \%$ and S.D. of $28 \%$. The T-bill rate is $8 \%$. Your clients choose to invest $70 \%$ of his portfolio in your portfolio fund and $30 \%$ in T-bill. What is the expected return and SD of your client's portfolio? What are the investment proportions of your client's overall portfolio (A, B, C stocks and T-bill)? What is the reward to variability ratio (slope) of your portfolio and your client's portfolio?
2. The following table, gives the rate of return on stock of Apple Computers and on the market portfolio for five years

| Year | Return on the <br> stock of Apple <br> Computers (\%) | Return on <br> Market <br> Portfolio <br> (\%) |
| :---: | :---: | :---: |
| 1 | -13 | -3 |
| 2 | 5 | 2 |
| 3 | 15 | 8 |
| 4 | 27 | 12 |
| 5 | 10 | 7 |

What is the beta of the stock of Apple Computers?
3. Determine the intrinsic value of an equity share, given the following data:

| Last dividend | $:$ Rs. 2.00 |
| :--- | :--- |
| Growth rate for next five years | $: 15 \%$ |
| Growth rate beyond 5 years | $: 10 \%$ |
| Required rate of return | $: 18 \%$ |

