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**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27**

**UG –VI SEMESTER**

**SEMESTER EXAMINATION: APRIL 2022**

**(Examination conducted in July-August 2022)**

**BC DEF 6618 - Security Analysis and Portfolio Management**

Time- 2 ½ hrs Max Marks-70

**This paper contains 2 printed page and four parts**

**Section A   
I.** Answer ***any five*** of the following (**2 x 5 = 10 marks)**

1. Give the meaning of diversification.
2. Mention two assumptions of CAPM.
3. What is the intrinsic value of a security?
4. Is investment the same as gambling? Support the answer with a reason.
5. What is passive strategy?
6. What is an arbitrage pricing theory?

**Section B**

**II.** Answer ***any three*** of the following (**5 x 3 = 15 marks)**

1. The rate of return of Wipro Ltd., for past six years are given below:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | 1 | 2 | 3 | 4 | 5 | 6 |
| Rate of Return% | 12 | 18 | -6 | 20 | 22 | 24 |

Calculate the average rate of return and standard deviation.

1. From the following information calculate beta of XYZ ltd.

|  |  |  |
| --- | --- | --- |
| Year | Return on security (%) | Return on Market (%) |
| 1 | 22 | 12 |
| 2 | 13 | 14 |
| 3 | 17 | 13 |
| 4 | 15 | 10 |

1. Enumerate the classification of industries.
2. Identify whether the following securities are overpriced, underpriced or fairly priced.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Securities | Estimated Returns | Beta(β) | Standard deviation | Rm | Rf |
| A | 15 | 1.2 | 30 | 16 | 4 |
| B | 12 | 1.5 | 20 | 16 | 4 |
| C | 11 | 2 | 40 | 16 | 4 |
| D | 8 | 0.8 | 10 | 16 | 4 |
| E | 9 | 1.4 | 20 | 16 | 4 |

**Section C**

**III.** Answer ***any two*** of the following (**15 x 2 = 30 marks)**

1. An investor wants to build a portfolio with the following four stocks. with the given details, find out
2. Individual return and risk
3. Portfolio risk and return

NOTE: The investment is spread equally over the stocks.  
 Market return= 11%

Market return variance=26

| COMPANY | ALPHA | BETA | RESIDUAL VALUE |
| --- | --- | --- | --- |
| A | 0.17 | 0.93 | 45.15 |
| B | 2.48 | 1.37 | 132.25 |
| C | 1.47 | 1.73 | 196.28 |
| D | 2.52 | 1.17 | 51.98 |

1. Write a detailed note on alternative avenues available for the purpose of investment.
2. From the following information rank the portfolio according to Sharpes, Treynor and Jensen’s ratio.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | A | B | C | D | E |
| Rp | 15 | 16 | 17 | 18 | 19 |
| Beta | 1.1 | 0.2 | 1.3 | 0.5 | 0.6 |
| σp | 6 | 7 | 8 | 9 | 10 |

The risk-free rate is 10% and the return of the market index is 12%.

**Section D**

**III. Answer the following (15 marks)**

1. Mr. Pinto is a potential client for your company. As a wealth manager you are asked to throw light on appraisal of intrinsic value done through the EIC framework.