

Internal Assessment Test - I

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|---------------|---|-----------|---------|------------|----|------|-----|---------|------------|
| Sub: | Security Analysis and Portfolio Management | | | | | | | Code: | 22MBAFM304 |
| Date: | 15-04-2025 | Duration: | 1.30 Hr | Max Marks: | 50 | Sem: | III | Branch: | MBA |
| SET- I | | | | | | | | | |

| | | OBE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|-----------|---------------|-------------|------------|-------------|----------------|-----|------|----|------|--------------------|------|----|------|-----|------|---|------|------|------|---|------|------|------|---|------|------|------|-------------|------|------|------|---------|------|---|-----|--|--|
| | | CO | RBT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Part A - Answer Any Two Full Questions (2* 20 = 40 marks) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 (a) | Recall the term Operational Efficiency. | [03] | CO4 L1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (b) | Justify the Company analysis in detail with examples. | [07] | CO3 L5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (c) | Calculate the securities that are overpriced and those that are under priced in terms of SML.Assume you are a portfolio manager. Based on the following details, determine the above pricing. | [10] | CO4 L3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table><tr><th>Security</th><th>Actual Return</th><th>β</th><th>σ</th></tr><tr><td>A</td><td>0.33</td><td>1.7</td><td>0.50</td></tr><tr><td>B</td><td>0.13</td><td>1.4</td><td>0.35</td></tr><tr><td>C</td><td>0.26</td><td>1.1</td><td>0.40</td></tr><tr><td>D</td><td>0.12</td><td>0.95</td><td>0.24</td></tr><tr><td>E</td><td>0.21</td><td>1.05</td><td>0.28</td></tr><tr><td>F</td><td>0.14</td><td>0.70</td><td>0.18</td></tr><tr><td>Nifty index</td><td>0.13</td><td>1.00</td><td>0.20</td></tr><tr><td>T-bills</td><td>0.09</td><td>0</td><td>0.0</td></tr></table> | | Security | Actual Return | β | σ | A | 0.33 | 1.7 | 0.50 | B | 0.13 | 1.4 | 0.35 | C | 0.26 | 1.1 | 0.40 | D | 0.12 | 0.95 | 0.24 | E | 0.21 | 1.05 | 0.28 | F | 0.14 | 0.70 | 0.18 | Nifty index | 0.13 | 1.00 | 0.20 | T-bills | 0.09 | 0 | 0.0 | | |
| Security | Actual Return | β | σ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2 (a) | Describe the steps in Traditional Approach in Portfolio Construction. | [03] | CO4 L1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (b) | Illustrate the Dow Theory in detail by considering the Technical Analysis. | [07] | CO3 L4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (c) | Solve the case. Use Sharp Index Model under Portfolio Evaluation. Nithya firm is trying to decide two out of the four investment funds. From the past performance, they were able to calculate the following average returns and standard deviations of these funds. The current risk free rate of interest is 9 percent. | [10] | CO4 L3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table><tr><td></td><td>Alpha Fund</td><td>Vinu Fund</td><td>Meenu Fund</td><td>Arvind Fund</td></tr><tr><td>Average Return</td><td>17</td><td>18</td><td>16</td><td>14</td></tr><tr><td>Standard Deviation</td><td>19</td><td>20</td><td>13</td><td>12</td></tr></table> | | | Alpha Fund | Vinu Fund | Meenu Fund | Arvind Fund | Average Return | 17 | 18 | 16 | 14 | Standard Deviation | 19 | 20 | 13 | 12 | | | | | | | | | | | | | | | | | | | | | | | |
| | Alpha Fund | Vinu Fund | Meenu Fund | Arvind Fund | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Average Return | 17 | 18 | 16 | 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Standard Deviation | 19 | 20 | 13 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 (a) | Describe the problems of Vast Diversification. | [03] | CO4 L1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (b) | Classify between Technical Analysis and Technical Analysis. | [07] | CO3 L4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (c) | Outline the Fundamental Analysis in detail. | [10] | CO3 L4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Part B - Compulsory (01*10=10 marks) – CASE STUDY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Derive the following data from the below case.

A financial analyst is analyzing two investment alternatives, stock Z and stock Y. The estimated rates of return and their chances of occurrence for the next year are given below:

[10]

| | |
|-----|----|
| | |
| CO4 | L5 |

| Probability of occurrence | Rate of Returns (%) | |
|---------------------------|---------------------|----|
| | Y | Z |
| 0.20 | 22 | 5 |
| 0.60 | 14 | 15 |
| 0.20 | -4 | 25 |

- Determine expected rate of return, variance, and standard deviation of Y and Z.
- Is 'Y' comparatively riskless?
- If the financial analyst wishes to invest half in Z and another half in Y, would it reduce the risk? Explain.

| Course Outcomes (COs) | | PO1 | PO2 | PO3 | PO4 | PO5 | PSO1 | PSO2 | PSO3 | PSO4 |
|-----------------------|--|-----|-------------------------|-----|-------------------------|-----|------|------|-------------------------|-----------------------------------|
| CO1: | Understand the capital market and various Instruments for Investment. | | | | | | | | | |
| CO2: | Assess the risk and return associated with investments and methods to value securities. | | | | | | | | | |
| CO3: | Analyze the Economy, Industry and Company framework for Investment. | | | | 1b, 2b, 3b, 3c | | | | 1b, 2b, 3b, 3c | |
| CO4: | Learn the theories of Portfolio management and also the tools and techniques for efficient portfolio management. | | 1a, 1c, 2a, 2c | | 3a, 4 | | | | | 1a, 1c, 2a, 2c, 3a, 4 |

| Cognitive level | KEYWORDS |
|-----------------|--|
| L1 - Remember | list, define, tell, describe, recite, recall, identify, show, label, tabulate, quote, name, who, when, where, etc. |
| L2 - Understand | describe, explain, paraphrase, restate, associate, contrast, summarize, differentiate interpret, discuss |
| L3 - Apply | calculate, predict, apply, solve, illustrate, use, demonstrate, determine, model, experiment, show, examine, modify |
| L4 - Analyze | classify, outline, break down, categorize, analyze, diagram, illustrate, infer, select |
| L5 - Evaluate | asses, decide, choose, rank, grade, test, measure, defend, recommend, convince, select, judge, support, conclude, argue, justify, compare, summarize, evaluate |
| L6 - Create | design, formulate, build, invent, create, compose, generate, derive, modify, develop, integrate |

PO1–Theoretical Knowledge; PO2–Foster Analytical and Critical Thinking Abilities for data-based decision making; PO3– Develop Value Based Leadership; PO4 –Ability to Understand and communicate various business aspects to global; PO5 – Ability to lead themselves and others in the achievement of organizational goals contributing effectively to a team environment;
PSO1- Comprehend Contemporary features of Business Management Science and its administration
PSO2- Analyze and interpret the dynamic situations for making Business Management strategies
PSO3- Handle responsibility with the ethical values for all actions undertaken by them
PSO4- Adapt and focus on achieving the organizational goal and objectives with complete zeal and commitment.

CI

CCI

HOD

SCHEME OF EVALUATION
Internal Assessment Test 1- 2025

Sub: SARM

Code: 22MB AF m 304

Date: 15-4-25 Duration: 90mins Max Marks: 50 Sem: III

Branch: MBA

Note: Part A - Answer Any Two Full Questions (20*02=40 Marks)

Part B - Compulsory (01*10= 10marks)

| Part | Question # | Description | Marks Distribution | | Max Marks |
|------|------------|--|--|----|-----------|
| A | 1 | a) Operational Efficiency Business metrics that measures how well a company uses its resources to produce goods or services. | 3 M | 3 | 20 M |
| | | b) Company Analysis: ✓ Understanding the Co. ✓ Financial Analysis. ✓ Macroeconomic Sector ✓ Corporate Governance ✓ Growth Prospects | 3 M for Points & 4 M for Exp. V. | 7 | |
| | | c) $R_i = 0.158$ A - under priced B - over priced C - under priced D - over priced E - under priced F - under priced | 3 M for Calculation & 7 M for Perceives. | 10 | |

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|---|----|---|---|----|------|
| 2 | a) | <p>Portfolio Construction</p> <ul style="list-style-type: none"> → Constraints → Objectives determination → Selection of Portfolio → Assessment of risk factor → Diversification | <p>3m 2m points</p> | 3 | 20 M |
| | b) | <p>Doc Theory - Technical</p> <ul style="list-style-type: none"> → Movement of the indices → Assumptions → Trend: <ul style="list-style-type: none"> ✓ Primary ✓ Secondary ✓ Short term / micro. | <p>3m for points 4m for Explanation 40%</p> | 7 | |
| | c) | <p>Sharpe Index = $\frac{R_p - R_f}{\sigma_p}$</p> <p>AR = 0.421</p> <p>VR = 0.45 ✓</p> <p>MR = 0.538 ✓</p> <p>A.R = 0.417</p> <p>Advice: meena fund & vima fund</p> | <p>8m for Calculation & 2m for Advice</p> | 10 | |

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|---|----|--|---|----|------|
| 3 | a) | Vast Diversification spreading the investment across a large number of different asset classes, industries and geographic regions to reduce risk. | 3 M 300 Expt. % | 3 | 20 M |
| | b) | Technical Analysis & Funda- mental Analysis ✓ FA - Financial Strength TA - Past History of price ✓ FA - Intrinsic Value TA - Short term price movement ✓ FA - SS & DD 300 & 3000 TA - Forecast SS & DD by studying the prices and volume & trading | 4 M 300 Key points 3 M 300 Expt. % | 7 | |
| | c) | Fundamental Analysis: ✓ Economic Analysis ✓ Industry Analysis ✓ Company Analysis | 4 M 300 points 6 M 300 Expt. % | 10 | |

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|---|---|--|---|----|------|
| B | 4 | <p>a)</p> <p>Expected Rate of Return</p> $R_y = 12 ; R_z = 15$ $\sigma_y^2 = 51.2 ; \sigma_z^2 = 10$ $\sigma_y = 8.6 ; \sigma_z = 6.32$ <p>b) Security 2.</p> <p>c) $\text{Cov} = -0.52$</p> $\rho = -0.96$ $\sigma_p = 1.54$ | <p>5 m 500 Point A,</p> <p>2 m 500 Point B</p> <p>3 m 500 Point C</p> | 10 | 10 M |
|---|---|--|---|----|------|