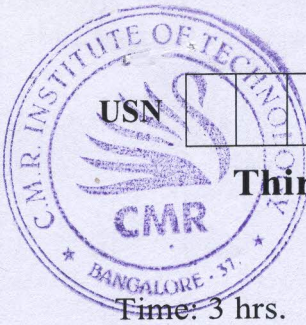


CBCS SCHEME



22MBAFM304

Third Semester MBA Degree Examination, June/July 2024 Security Analysis and Portfolio Management

Time: 3 hrs.

Max. Marks: 100

- Note:**
1. Answer any **FOUR** full questions from Q.No.1 to Q.No.7.
 2. Question No. 8 is compulsory.
 3. M : Marks , L: Bloom's level , C: Course outcomes.
 4. Time Value Table is permitted.

		M	L	C															
Q.1	a.	"Investment is different from speculation". Justify.																	
	b.	3	L4	CO1															
	c.	7	L2	CO2															
Q.2	a.	Define Risk. Explain the various types of Risk.																	
	b.	10	L4	CO1															
	c.	"Investment is a systematically planned employment of funds". On the light of this statement, explain the process of investment.																	
Q.3	a.	3	L2	CO1															
	b.	What are derivative? Briefly explain.																	
	c.	7	L4	CO2															
Q.3	a.	"Stocks are risky, but bonds are not". Explain.																	
	b.	What do you understand from portfolio management strategies? Explain.																	
	c.	10	L2	CO1															
Q.3	a.	What do you mean by Bond Duration? Briefly explain.																	
	b.	Calculate the expected return and the standard deviation of returns for a stock having the following probability distribution of returns.																	
	c.	<table border="1" style="width: 100%; border-collapse: collapse; margin: 5px 0;"> <tr> <td style="text-align: center;">Possible returns (%)</td> <td style="text-align: center;">-25</td> <td style="text-align: center;">-10</td> <td style="text-align: center;">0</td> <td style="text-align: center;">15</td> <td style="text-align: center;">20</td> <td style="text-align: center;">30</td> <td style="text-align: center;">35</td> </tr> <tr> <td style="text-align: center;">Probability</td> <td style="text-align: center;">0.05</td> <td style="text-align: center;">0.10</td> <td style="text-align: center;">0.10</td> <td style="text-align: center;">0.15</td> <td style="text-align: center;">0.25</td> <td style="text-align: center;">0.20</td> <td style="text-align: center;">0.15</td> </tr> </table>			Possible returns (%)	-25	-10	0	15	20	30	35	Probability	0.05	0.10	0.10	0.15	0.25	0.20
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Probability	0.05	0.10	0.10	0.15	0.25	0.20	0.15												
Q.3	a.	A stock casting Rs. 120 pays no dividend. The possible prices that the stock might sell for at the end of the year with the respective probabilities as follows :																	
	b.	<table border="1" style="width: 100%; border-collapse: collapse; margin: 5px 0;"> <tr> <td style="text-align: center;">Price (Rs.)</td> <td style="text-align: center;">Probability</td> </tr> <tr> <td style="text-align: center;">115</td> <td style="text-align: center;">0.1</td> </tr> <tr> <td style="text-align: center;">120</td> <td style="text-align: center;">0.1</td> </tr> <tr> <td style="text-align: center;">125</td> <td style="text-align: center;">0.2</td> </tr> <tr> <td style="text-align: center;">130</td> <td style="text-align: center;">0.3</td> </tr> <tr> <td style="text-align: center;">135</td> <td style="text-align: center;">0.2</td> </tr> <tr> <td style="text-align: center;">140</td> <td style="text-align: center;">0.1</td> </tr> </table>			Price (Rs.)	Probability	115	0.1	120	0.1	125	0.2	130	0.3	135	0.2	140	0.1	
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140	0.1																		
c.	10	L5	CO2																
Q.4	a.	Calculate the expected Return																	
	b.	Calculate the standard deviation of the return																	
Q.4	a.	What are Mutual Funds? Briefly explain.																	
	b.	3	L2	CO4															
Q.4	a.	A person owns a Rs. 1000 face value bond with 5 years to maturity. The bond makes annual interest payments of Rs. 80. The bond is currently priced at Rs. 960. Given that the Market interest rate is 10%, should the investor hold or sell the bond?																	
	b.	7	L4	CO2															

	c.	A portfolio is constituted with four securities having the following characteristics. <table border="1" data-bbox="513 235 1007 432"> <thead> <tr> <th>Security</th> <th>Return (%)</th> <th>Weight age</th> </tr> </thead> <tbody> <tr> <td>P</td> <td>17.5</td> <td>0.15</td> </tr> <tr> <td>Q</td> <td>24.8</td> <td>0.25</td> </tr> <tr> <td>R</td> <td>15.7</td> <td>0.45</td> </tr> <tr> <td>S</td> <td>21.3</td> <td>0.15</td> </tr> </tbody> </table> <p>Calculate the expected return of the portfolio. Would the return increase if the investment each security if going to be equal?</p>	Security	Return (%)	Weight age	P	17.5	0.15	Q	24.8	0.25	R	15.7	0.45	S	21.3	0.15	10	L4	CO2																	
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Q.5	a.	What is the significance of P/E Ratio in security analysis? Briefly explain.	3	L4	CO3																																
	b.	A company paid dividends amounting to Rs. 0.75 per share during the next year investors forecast a dividend of Rs. 3 per share in the year after that. There after, it is expected that dividends will grow at 10% per year into an indefinite future. Would you buy/sell the share if the current price of the share is Rs. 54? Investors required rate of return is 15%.	7	L4	CO3																																
	c.	Jaya Ltd., has a 14% debenture with a face value of Rs. 100 that matures at par in 15 years. The debenture is callable in 5 years at Rs. 114. It currently sells for Rs. 105. Calculate each of the following for this debenture. i) Current yield ii) Yield to call iii) Yield to maturity	10	L5	CO3																																
Q.6	a.	How RSI is helpful in stock analysis? Briefly explain.	3	L4	CO3																																
	b.	What do you understand from Industry analysis? On the light of this explain industry life cycle.	7	L2	CO3																																
	c.	Calculate 14 days RSI from the following data : <table border="1" data-bbox="614 1317 919 1928"> <thead> <tr> <th>Days</th> <th>Closing Price</th> </tr> </thead> <tbody> <tr><td>1</td><td>130</td></tr> <tr><td>2</td><td>132</td></tr> <tr><td>3</td><td>130</td></tr> <tr><td>4</td><td>135</td></tr> <tr><td>5</td><td>137</td></tr> <tr><td>6</td><td>134</td></tr> <tr><td>7</td><td>136</td></tr> <tr><td>8</td><td>140</td></tr> <tr><td>9</td><td>140</td></tr> <tr><td>10</td><td>142</td></tr> <tr><td>11</td><td>139</td></tr> <tr><td>12</td><td>141</td></tr> <tr><td>13</td><td>145</td></tr> <tr><td>14</td><td>143</td></tr> <tr><td>15</td><td>145</td></tr> </tbody> </table>	Days	Closing Price	1	130	2	132	3	130	4	135	5	137	6	134	7	136	8	140	9	140	10	142	11	139	12	141	13	145	14	143	15	145	10	L5	CO3
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Q.7	a.	What do understand from an efficient market? Briefly explain the '3' forms of market efficiency.	3	L2	CO3																																

	<p>b. Assume you are a portfolio manager based on the following details; determine the securities that are overpriced and those that are underpriced in terms of SML.</p> <table border="1" data-bbox="504 275 1029 622"> <thead> <tr> <th>Security</th> <th>Actual Return</th> <th>β</th> <th>σ</th> </tr> </thead> <tbody> <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</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</td> </tr> </tbody> </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	0.13	1.00	0.20	T-Bills	0.09	0	0	7	L4	CO3
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	<p>c. The following information is provided regarding the performance of Fund 1, Fund 2 and Fund 3 for a 6 month period. The risk for rate of interest is assumed to be 9% Rank the portfolio based on Sharpe and Treynors index</p> <table border="1" data-bbox="560 824 975 981"> <thead> <tr> <th>Funds</th> <th>RP(%)</th> <th>σ_P</th> <th>β</th> </tr> </thead> <tbody> <tr> <td>Fund 1</td> <td>25.38</td> <td>4</td> <td>0.23</td> </tr> <tr> <td>Fund 2</td> <td>25.11</td> <td>9.01</td> <td>0.56</td> </tr> <tr> <td>Fund 3</td> <td>25.01</td> <td>3.55</td> <td>0.59</td> </tr> </tbody> </table>	Funds	RP(%)	σ_P	β	Fund 1	25.38	4	0.23	Fund 2	25.11	9.01	0.56	Fund 3	25.01	3.55	0.59	10	L4	CO4																				
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Q.8	<p>Compulsory :</p> <p>Stock 'L' and 'M' have yielded the following returns for the past two years.</p> <table border="1" data-bbox="592 1200 946 1317"> <thead> <tr> <th>Years</th> <th>Returns (%)</th> <th>M</th> </tr> </thead> <tbody> <tr> <td>2011</td> <td>12</td> <td>14</td> </tr> <tr> <td>2012</td> <td>18</td> <td>12</td> </tr> </tbody> </table> <p>a) What is the expected return on a portfolio made-up of 60% of 'L' and 40% of 'M'?</p> <p>b) Find out standard Deviation of each stock?</p> <p>c) What is the covariance and co-efficient of correlation between stock 'L' and 'M'?</p> <p>d) What is the portfolio risk of a portfolio made-up of 60% of L and 40% of 'M'?</p>	Years	Returns (%)	M	2011	12	14	2012	18	12	20	L5	CO2																											
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