


Name:		
Enrolment No:		
<b>UNIVERSITY OF PETROLEUM AND ENERGY STUDIES</b> <b>Online End Semester Examination, May 2021</b>		
<b>Course: Security Analysis &amp; Portfolio Management</b> <b>Program: BBA FAS</b> <b>Course Code: FINC3010P</b>		<b>Semester: 4</b> <b>Time 03 hrs.</b> <b>Max. Marks: 100</b>
<b>SECTION A</b> <b>1. Each Question will carry 5 Marks</b> <b>2. Instruction: Complete the statement / Select the correct answer(s)</b>		
S. No.	Questions	CO
Q1	When short term average crosses long term average from above, it generates a) Buy b) Sell c) Hold d) Wait	CO1
Q2	When the MACD penetrates the signal line from below and moves above, it gives a _____ signal.	CO1
Q3	A _____ formation gives a bullish signal and indicate a possible reversal of downward trend.	CO4
Q4	A support level exists at a a) Price fixed by stock exchange brokers b) Price fixed by regulatory authority of the stock exchange c) Price where considerable demand is created d) Low price where stock would be available	CO1
Q5	The _____ measures the overall efficiency of capital invested in business.	CO1
Q6	Overbought regions indicate a) Less shares are sold b) Supply is more c) Potential fall in the price level d) Potential rise in the price level	CO4
<b>SECTION B</b> <b>1. Each Question will carry 10 Marks</b> <b>2. Instruction: Write short or Brief Notes</b>		
Q7	a) Define risk and distinguish between systematic and unsystematic risk	CO1
Q8	a) Define the various forms of market efficiency. What do they have in common? b) What are financial and operating leverages?	CO3

Q9	Compare technical and fundamental analysis. Explain the components of a candlestick chart. What do you understand by Marubozu, doji, harami and star positions	CO3
Q10	Explain the following terms a) EMA b) MACD c) ROC d) RSI	CO2
Q11	Explain the terms a) Markowitz Model b) Sharpe Index Model c) Capital Asset Pricing Theory	CO4

### SECTION C

1. Each Question will carry 20 Marks
2. Instruction: Write long answers

Q12	<p>a) The following parameters apply to Stocks Y and Z</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Stock Y</th> <th>Stock Z</th> </tr> </thead> <tbody> <tr> <td>Expected Return</td> <td>20</td> <td>30</td> </tr> <tr> <td>Expected variance</td> <td>16</td> <td>25</td> </tr> <tr> <td>Covariance YZ</td> <td>20</td> <td></td> </tr> </tbody> </table> <p>Is there any advantage of holding a combination of Y and Z?</p> <p>b) Corporations X and Y present the following expected risk and return for the following year.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td><math>R_x=15\%</math></td> <td><math>\sigma_x^2=16\%</math></td> </tr> <tr> <td><math>R_y=18\%</math></td> <td><math>\sigma_y^2=25\%</math></td> </tr> </tbody> </table> <p>Determine the correlation coefficient that would be necessary to have a level of risk (<math>\sigma_p</math>) of portfolio consisting of 50% of each asset equal to 1. Also calculate the expected return of the equally weighted portfolio.</p> <p>c) Assume you are a portfolio manager. Based on the following information, determine the securities that are overpriced and those that are underpriced in terms of SML</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Security</th> <th>Actual Return</th> <th><math>\beta</math></th> <th><math>\sigma</math></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 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> </tbody> </table>		Stock Y	Stock Z	Expected Return	20	30	Expected variance	16	25	Covariance YZ	20		$R_x=15\%$	$\sigma_x^2=16\%$	$R_y=18\%$	$\sigma_y^2=25\%$	Security	Actual Return	$\beta$	$\sigma$	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	CO4 5+7+8
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