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PRESIDENCY UNIVERSITY

BENGALURU

End - Term Examinations - December 2025

Date: 08-12- 2025

Time: 01:00pm – 04:00pm

School: SOC	Program: Bachelor of Business Administration	
Course Code : BFI3001	Course Name: Security Analysis and Portfolio Management	
Semester: V	Max Marks: 100	Weightage: 50%

CO - Levels	CO1	CO2	CO3	CO4	CO5
Marks	20	20	20	20	20

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.

10Q x 2M=20M

1.	Define Unsystematic Risk	2 Marks	L1	C01
2.	State the difference between Resistance and Support.	2 Marks	L1	C01
3.	What is the difference between real assets and financial assets?	2 Marks	L1	C02
4.	Define bond duration.	2 Marks	L1	C02
5.	State the formula for Price to Earnings Ratio.	2 Marks	L1	C03
6.	Expand EMH in technical analysis.	2 Marks	L1	C03
7.	Define alpha in capital market.	2 Marks	L1	C04
8.	Expand SML and CML.	2 Marks	L1	C04
9.	What is formula for treynor ratio.	2 Marks	L1	C05
10.	Write the formula for Jenson measure.	2 Marks	L1	C05

Part B

Answer ALL the Questions. Each question carries 7 marks.

5Q x 7M = 35M

11.	Explain the meaning of investment and types of investment.	07 Marks	L2	C01																							
Or																											
12.	Distinguish between Capital Market and Money Market.	07 Marks	L2	C01																							
13.	Ms Kala wants to go on a European Tour 5 Years from now for which she wants to invest a single amount today and create the required corpus for the tour from this investment. As a Financial Expert, suggest Ms Kala any Two specific Investments to achieve her financial objective.	07 Marks	L2	C02																							
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14.	Ranjith, a seasoned investor, is considering investing Rs. 600,000 in a promising tech startup that specializes in artificial intelligence solutions. The startup has a solid business plan, a talented team, and a potentially disruptive product. However, the tech industry is competitive, and startups are inherently risky. Before making the investment, John decides to calculate the risks involved before investing the fund. Assume you are the investment manager; how will you explain to him about various risks associated with his investment decisions	07 Marks	L2	C02																							
15.	Discuss the porter five force model in detail.	07 Marks	L2	C03																							
Or																											
16.	Discuss the Efficient Market Hypothesis and its form.	07 Marks	L2	C03																							
17.	An 8-year, 12% coupon bond with a par value of Rs.100 on which interest is payable semi-annually. The required return on this bond is 14%. You are required to calculate the value of the bond.	07 Marks	L3	C04																							
Or																											
18.	Rs. 100 Par value bond bears a coupon rate of 14% and matures after 5 years. Interest is payable semi-annually. Compute the value of the bond if the required rate of return is 16%.	07 Marks	L3	C04																							
19.	Mr Naresh has invested in the following 2 shares SBI and Axis Bank. The expected return on SBI is 12% and the Standard deviation is 7%. Expected return on Axis Bank is 20% and standard deviation is 15%. The correlation between both the bank is 0.15. a) He wished to invest 50% in each stocks. b) 25% in SBI and 75% in Axis Bank. Please advise him.	07 Marks	L3	C05																							
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20.	The following are the data on five mutual funds and the risk free rate is 8%. Calculate reward to volatility ratio and rank these portfolio using sharpe method and Treynor method.	07 Marks	L	C05																							
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Fund</th> <th style="text-align: center;">Return</th> <th style="text-align: center;">Std Dev</th> <th style="text-align: center;">Beta</th> </tr> </thead> <tbody> <tr> <td>Bharti Axa</td> <td style="text-align: center;">18</td> <td style="text-align: center;">7</td> <td style="text-align: center;">1.25</td> </tr> <tr> <td>Airtel</td> <td style="text-align: center;">15</td> <td style="text-align: center;">10</td> <td style="text-align: center;">0.75</td> </tr> <tr> <td>Nippon</td> <td style="text-align: center;">16</td> <td style="text-align: center;">5</td> <td style="text-align: center;">1.40</td> </tr> <tr> <td>Godrej Capital</td> <td style="text-align: center;">21</td> <td style="text-align: center;">8</td> <td style="text-align: center;">0.98</td> </tr> <tr> <td>Axis MF</td> <td style="text-align: center;">23</td> <td style="text-align: center;">9.5</td> <td style="text-align: center;">1.50</td> </tr> </tbody> </table>	Fund	Return	Std Dev	Beta	Bharti Axa	18	7	1.25	Airtel	15	10	0.75	Nippon	16	5	1.40	Godrej Capital	21	8	0.98	Axis MF	23	9.5	1.50		
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Part C

Answer any three Questions. Each question carries 15marks

3Q x 15M=45M

21.	<p>Given is the market return and the LIC company returns for a particular period: (1) Calculate the beta value of the company. (2) If the market return is 8%, what would be the scrip return?</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 50%;">NSE return (R_m)</th> <th style="width: 50%;">Stock Return (R_i)</th> </tr> </thead> <tbody> <tr><td>0.49</td><td>0.27</td></tr> <tr><td>0.59</td><td>0.59</td></tr> <tr><td>0.50</td><td>0.49</td></tr> <tr><td>0.60</td><td>0.31</td></tr> <tr><td>0.80</td><td>0.40</td></tr> <tr><td>0.50</td><td>0.50</td></tr> <tr><td>0.79</td><td>0.69</td></tr> <tr><td>0.40</td><td>0.51</td></tr> <tr><td>0.70</td><td>0.49</td></tr> </tbody> </table>	NSE return (R _m)	Stock Return (R _i)	0.49	0.27	0.59	0.59	0.50	0.49	0.60	0.31	0.80	0.40	0.50	0.50	0.79	0.69	0.40	0.51	0.70	0.49	15 Marks	L4	CO1
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22.	<p>Consider a Rs. 2000 par value bond, carrying a coupon rate of 13.5 percent, and maturing after 5 years. The bond is currently selling for RS. 1090.</p> <ul style="list-style-type: none"> •What is the YTM of the bond according to trial and error procedure ? •What is the YTM of the bond according to approximation approach ? •What is the realised YTM if the re-investment rate is 11 % ? 	15 Marks	L3	CO2																				
23.	<p>Evaluate the economic analysis, industry analysis and company analysis of fundamental analysis with suitable examples.</p>	15 Marks	L4	CO3																				
24.	<p>Mr. Sanjeev is considering 3 securities of investment details are as follows</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 15%;">Market</th> <th style="width: 15%;">Probability</th> <th style="width: 15%;">IDBI</th> <th style="width: 15%;">Shriram</th> <th style="width: 15%;">Britannia</th> </tr> </thead> <tbody> <tr> <td>Recession</td> <td>0.40</td> <td>11</td> <td>10</td> <td>13</td> </tr> <tr> <td>Average</td> <td>0.50</td> <td>12</td> <td>11</td> <td>19</td> </tr> <tr> <td>Peak</td> <td>0.10</td> <td>15</td> <td>17</td> <td>09</td> </tr> </tbody> </table> <p style="margin-left: 20px;">a) Find out each stock expected return and risk b) Apply mean -variance criteria for selection c) Find out covariance between IDBI & Shriram, Shriram&Britannia, and IDBI & Britannia d) What is the risk and return of the portfolio, if the 1/3rd is invested in each of the securities.</p>	Market	Probability	IDBI	Shriram	Britannia	Recession	0.40	11	10	13	Average	0.50	12	11	19	Peak	0.10	15	17	09	15 Marks	L4	CO4
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Recession	0.40	11	10	13																				
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25.	<p>Consider the following information of three mutual funds P, Q and R and the Market: The mean risk-free rate was 9%.</p> <p style="margin-left: 20px;">a. Calculate and rank the Treynor measure, Sharpe measure and Jensen measure for the three mutual funds and the market index.</p>	15 Marks	L4	CO5																				

- b. What should be the risk free rate such that funds Q and R will have the same Treynor's ratio?
- c. Did any portfolios outperform the market? Why?

Stocks	Mean Return(%)	Std Dev(%)	Beta	Risk Free Rate (%)
P	15	26.1	1.20	8.6
Q	14.5	18.7	0.92	
R	12.0	21.8	1.04	
MARKET INDEX	13	22.5	1.00	