

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA – SEMESTER –III-EXAMINATION – WINTER-2023

Subject Code:1539503**Date: 02-12-2023****Subject Name: Security Analysis and Portfolio Management****Time:10:30 AM TO 1:30 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of simple calculators and non-programmable scientific calculators are permitted.

Q. No.	Question Text and Description	Marks
Q.1	Define the following (a) Cumulative wealth index (b) Zero variance portfolio (c) P/E Ratio (d) Support Level (e) Beta (f) Security market line (g) Market risk	14
Q.2	(a) What is Investment? Differentiate between Investment and Speculation. (b) Differentiate between fundamental analysis and technical analysis.	07 07
OR		
	(b) What is ROE? Explain one factor, three factor and five factor ROE.	07
Q.3	(a) Take any Industry in India of your choice and do Industry Analysis for the same. (b) The following information is given on a portfolio made of two stocks: Their weights are: $w_1 = 0.6$, $w_2 = 0.4$. R_1 (Return on stock 1)= 15% and R_2 (Return on stock 2)= 18%. s_1 (Standard deviation on stock 1) = 10%, s_2 (Standard deviation of stock 2) = 16%. Their correlation coefficient: $r_{12} = 0.5$ What is the return and the standard deviation of portfolio return?	07 07
OR		
Q.3	(a) What is Risk? Explain systematic Risk and unsystematic Risk.	07

Q.3 (b) The probability distribution of the rate of return on a stock is given below:

07

State of the economy	Probability of occurrence	Return in %
Boom	0.1	14
Normal	0.2	12
Stagnation	0.4	11
Recession	0.3	10

From the information above find the return and risk of the stock.

Q.4 (a) What is duration of bond? Mention properties of duration.

07

Q.4 (b) Mr Sumant Verma wants to invest in the bond. He has collected the following information about the bond of Laurel Ltd

07

Face value= Rs 1000

Coupon rate=9% p.a

YTM=7%

Years to maturity=5 years.

Find the duration of the bond.

OR

Q.4 (a) Discuss the benefits and risks associated with investment in bonds.

07

Q.4 (b) Calculate characteristic line of ABC Limited based on the information below

07

Year	ABC Limited (%)	Market (%)
2013	16	14
2014	15	12
2015	14	12
2016	30	26
2017	11	12
2018	26	24
2019	23	25

Q.5

CASE STUDY:

Mr Amit Mehra wants to invest in mutual fund. You being a finance expert, he has approached you for your advice.

<i>Portfolio</i>	<i>Mean return (%)</i>	<i>Standard deviation (%)</i>	<i>Beta</i>
X	20	22	1.5
Y	16	13	1.2
Z	12	12	0.8
Market index	10	10	1.00

The risk free rate of return is 6%.

Kindly answer his following questions from the data above.

- (a) Calculate Treynor and Sharpe Measure for the three mutual fund portfolios and Market index. **07**
- (b) Discuss various types of mutual funds. **07**

OR

Q.5

- (a) Calculate Jensen Measure for the three mutual fund portfolios and Market index. **07**
- (b) What is mutual fund? Discuss pros and cons of investing in mutual funds. **07**
