K.J. SOMAIYA INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH

PGDM (FS) Trimester - III (2017-2019)

End Term Examination

Subject: Portfolio & Investment Management	**Specialization: Finance**
Date of Exam: 28th March 2018	**Marks: 50**
Duration: 3 Hours	**Time: 10.30a.m -1.30p.m**

Instructions

Q 1 is compulsory and would carry **20 marks.** In addition to Q 1, **there are Five Questions**. **Each question would carry 10 marks.** Attempt any Three out of the remaining Five Questions. Please Attach Charts with main Answer Sheet.

Q.1) a) Case: Which Stocks will Fund Manager Include in VIJAY's Portfolio……???
Mr Vijay has randomly selected stocks from few sectors. He expects following returns from the stock. He has selected stocks with the systematic risk in the range of 0.8 to 2.5 and unsystematic risk in the range of 15-40. He has all the data available in front of him, he is confused which stock to select in his portfolio. He has approached Portfolio Fund Manager to help him for the same. The Fund Manager needs to develop optimum portfolio keeping in mind the risk-free-return is 8% and variance in the market index (σ^2_m)= 12%.The data is as follows

Security	Expected Return	Beta	Security's unsystematic risk
SBI	20	1	40
RBL	18	2.5	35
ITC	12	1.5	30
IDBI	16	1	35
ICICI	14	0.8	25
MRPL	10	1.2	15
TV Today	17	1.6	30
NDTV	15	2	35

b) Find the portfolio variance of a portfolio consisting of equities, bonds and real estate, if the portfolio weights are 25%, 50% and 25%. The Standard deviations are 0.1689, 0.0716 and 0.0345 respectively. And the correlations are 0.45 for equity and bonds, 0.35 for equities and real estate, and 0.20 for bonds and real estate.

Q.2) Attempt Any 1
a) Case: Is This the Right Stock……???
Mr Mohan, after considering many stocks in the banking sector, has selected the HDFC Bank stock. He has downloaded the stock price and the sensex values from BSE website and as unusual, he is concerned with market upswings an downswings. He knows that HDFC Bank was able to withstand the global financial crisis. Yet he wants to know how much market movements can affect the HDFC stock price. What will happen to the stock return if there is downturn in the market? Will the uptrend reward him more than the market return? He turns on to you, an MBA student with specialization in finance, for help. How will you help him? He has downloaded the price data for HDFC stock and Sensex value from BSE website. The data is as follows:

Date	Sensex	HDFC Bank	Date	Sensex	HDFC Bank
01/04/2012	17583.97	514.15	23/04/2012	17361.74	513.85
02/04/2012	17636.8	518.3	26/04/2012	17052.78	510.55
03/04/2012	17636.99	518.9	27/04/2012	17257.36	518.05
05/04/2012	17362.87	511.3	28/04/2012	17121.62	513.3
06/04/2012	17173.29	507.6	29/04/2012	17058.61	510.7
07/04/2012	17145.52	515.3	30/04/2012	17404.2	520.05
09/04/2012	17503.24	522.85			
12/04/2012	17587.67	519.85			
13/04/2012	17813.62	524.8			
14/04/2012	17919.3	527.05			
15/04/2012	17675.85	510.95			
16/04/2012	17466.2	507.7			
19/04/2012	17273.37	498.65			
20/04/2012	17316.18	504.85			
21/04/2012	17601.71	515.4			
22/04/2012	17196.47	502.6			

b) 1) How do Business cycles determine the investment Behaviour?
   2) Discuss Broad guidelines for Analysing IT sector globally? Indicate current outlook on the sector.
   3) Explain Relative valuation method to arrive at target price of stock.

Q.3) Attempt Any 1

a) The following data are available to you as portfolio manager

Security	Estimated return (%)	Beta	Standard deviation
Tata Steel	30	2	50
Tata Motors	25	1.5	40
Ashok Leyland	20	1	30
Maruti	11.5	0.8	25
Eicher Motor	10	0.5	20
Nifty index	15	1	18
Govt Security	7	0	0

1) In terms of the security market line, which of the securities listed above are underpriced?

2) Assuming that a portfolio is constructed using equal proportions of the above five securities listed above, calculate the expected return and risk of such a portfolio.

b) An investor has a choice of four stocks for investment. Their rates of return and probabilities are given below.

Marico		ITC		HUL		UBL	
r %	p%	r %	p%	r %	p%	r %	p%
-30	20	-20	15	-20	20	-10	10
0	40	0	35	10	40	0	25
30	30	20	45	40	30	10	40
70	10	40	5	80	10	20	25

Are all these stocks attractive investments? Give reasons

Q.4) Attempt Any 1

a) There are four funds whose details are given in the table. Compare these funds on performance using the Sharpe, Treynor and Jensen measures.

Name of the Fund	Return Earned (%)	Portfolio Beta	Portfolio Standard Deviation(%)
Super Star	25	1.13	22.7
True Balance	17	0.95	17.2
Sure Return	20	0.98	20.9
Safety Net	15.3	1	15.6

Risk-free return is 8.5%

b) Two Portfolios were constructed, one considering of equity shares and other consisting of debentures. The rupee value of equity shares, at the time of constructing the portfolio was Rs

1,20,000-(at the rate of Rs 100/- per share) and that of the debentures was Rs 80,000/-.The investor opts to use constant rupee plan and fixes a revision point of 10%.The Share prices show fluctuations at periodical intervals as under.

Period	Share Price(Rs)
1	100(at the start i.e. at the time of constructing the portfolio)
2	90
3	85
4	75
5	80
6	95

Explain the portfolio revision pattern of the investor

Q.5) Attempt Any 1

a) Mr FedUp wants to invest an amount of Rs 520 lakhs and had approached his Portfolio Manager. The Portfolio Manager had advised Mr. FedUp to invest in the following securities

Security	Moderate	Better	Good	Very Good	Best
Amount(Rs Lakh)	60	80	100	120	160
Beta	0.5	1	0.8	1.2	1.5

You are required to advise Mr. FedUp in regard to the following

1) Expected return on the portfolio, if the Government Securities are at 8% and the Nifty is yielding 10%

2) Advisability of replacing Security "Better" with Nifty

b) Consider a portfolio of four securities with the following characteristic

Security	Weighting	αi	β	Residual variance(σ^2_{ei})
RIL	0.2	2	1.2	320
ONGC	0.3	1.7	0.8	450
Cairn India	0.1	-0.8	1.6	270
BPCL	0.4	1.2	1.3	180

Calculate the return and risk of the portfolio under single index model, if the return on market index is 16.4% and the standard deviation of return on market index is 14%

Q.6) Attempt Any 1

a) Plot at what Price levels you will Buy and Sell stock and indicate what you will do currently with justification for the same.

   a) Identify using Candle Stick Patten and Describe the Pattern –**Refer Wipro Ltd**

b) Using Bollinger Band and Describe Bollinger Band- **Refer Asian Paints**

c) Using 2 Moving Averages 14 Day-Exponential and 21 Day Moving Average which is plotted in the chart –**Refer SBI Ltd**

d) Using RSI and MACD- **Refer Emami Ltd**

b) Explain the impact of increase in Brent Crude Oil on various Sectors.