

Jagan Institute of Management Studies
End-Term Examination, September, 2016
Trimester IV – PGDM/PGDM (IB)/PGDM (RM) 2015-17

Security Analysis & Portfolio Management
ET_PG_IB_RM_SAPM_2609

Time: 3 Hrs.

M. Marks: 70

INSTRUCTIONS: Attempt any FIVE questions including Q1 & Q7 which are compulsory.

Q 1 Answer any **SEVEN** of the followings in *not more than 30 words*.

- a) Security Market Line.
- b) Leading economic indicators.
- c) Beta of a stock is -2. What does it mean?
- d) Efficient frontier.
- e) Support and Resistance.
- f) Expand DJTA and DJIA.
- g) Capital Index Bonds.
- h) Optimum portfolio.
- i) Diversification.

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Q 2 a) How does investment differ from speculation? Elaborate step wise the process of investment.

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b) With the help of diagram explain three continuation and three reverse patterns used by technical analysts.

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Q 3 a) Markowitz, in his mean variance model, stressed the importance of correlation among the different stocks' returns. Justify his point. Elaborate Markowitz Model of optimal portfolio construction.

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b) Book Building is a process undertaken by which a demand for the securities proposed to be issued by a corporate body is elicited and built up and the price for such securities is assessed for the determination of the quantum of such securities to be issued. The price determined by book building is more realistic and fair as compared to traditional methods. Justify this statement and elaborate the process of book building.

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Q 4 a) Rank the three funds given below with the help of Sharpe and Treynor methods and compare the results. Given risk free return 9%.

Portfolio	Return (%)	Beta	σ
A	18	1.8	27
B	14	0.9	18
C	15	0.6	8
Market	13	1	12

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- b) A portfolio consists of two securities P and Q with the following parameters.

	P	Q
Expected Return (%)	35	22
Std. Deviation (%)	20	26
Correlation Coeff. r	- 0.5	

If securities are equally weighted, how much is the risk and return of the portfolio? 5

- c) An investor has a choice of 2 stocks for investment. Their rates of return and probabilities are given below.

A		B	
R (%)	p(%)	R (%)	p(%)
-30	20	-20	15
0	40	0	35
30	30	20	45
70	10	40	5

Which stock should the investor select on the basis of risk and return analysis? Show calculations. 4

- Q 5** a) Consider a bond selling at a par value of Rs. 1000 with 4 years to maturity and 8% coupon payment.

- i) Calculate the bond's duration.
- ii) If the interest rate increases to 9%, what would be the price change? 4

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

Security	Estimated Return (%)	Beta	Std. Deviation (%)
A	30	1.3	25
B	10	1.5	30
C	20	0.75	20
D	15	1.7	25
E	25	1.8	30
Market Index	12	1.00	20
Govt. Security	8	0	0

On the basis of CAPM model, which of the securities listed above are undervalued? 4

- c) Consider a portfolio of three securities with the following characteristics.

Security	Weights	α_i	β_i	Residual Variance $\sigma^2_{\epsilon_i}(\%)$
A	0.10	-0.28	0.91	23
B	0.15	0.76	0.87	60
C	0.20	2.52	1.17	52

Assuming the return on market index to be 14.5% and the standard deviation of return on market index to be 16%, calculate the portfolio return and risk using Sharpe single index model. 6

- Q 6 a)** The economy is doing well and the growth in the industrial sector is moderate. On a particular day, the news of fall of the government at the center hit the market. Immediately, hysterical selling began and many stock prices fell between 10% and 20%. The Sensex fell by 800 points in 2 hours' time. However, within few days the shares resumed the same prices they had been before the fall of the government. The market regained too. In your opinion, did the market temporarily collapse because of the interest rate risk, purchasing power risk, management risk or what else? Analyze. 3
- b)** Explain how CAPM Model is used to price a security or an asset. 3
- c)** Discuss Random Walk Theory and three forms of Efficient Market Hypothesis. 4
- d)** How do circuit filters and circuit breakers help stock exchanges control the malpractices in stock trading? 4

Q 7 ABB Ltd is into customized software development. The financial ratios of ABB Ltd. and Industry average as given below.

Particulars	ABB	Industry
Current ratio	2.54	2.30
Acid-test ratio	1.10	1.20
Debtors turnover	6	7
Stock turnover	3.80	3.85
Long term debt to total capital	37%	34%
Gross profit margin	38%	40%
Net profit	18%	15%
ROE	24%	19%
ROTA	7%	8%

Analyze the case and answer the following questions.

- i) Analyze the present economic condition especially in respect to factors like GDP, FDI, Monsoon and Agriculture and stock market scenario of India.
- ii) List the factors would you look for under Industry analysis while doing fundamental analysis of ABB Ltd.
- iii) Analyze the given ratios and suggest whether it is a good proposition to invest in ABB or not? 14
