# BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI, K K BIRLA GOA CAMPUS 

 FIRST SEMESTER 2019-20
## MID SEMESTER EXAMINATION

SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT ECON F412/FIN F313
MAX MARKS: 30
DATE:1/10/2019
TIME: 4PM-5.30PM
INSTRUCTIONS: Answer all questions. Mere 'yes' or 'No' would fetch no marks. Justify your answers wherever necessary.

Q1a- Give the equation for an Investment return that justifies its definition.
Explain through an arithmetic example.
Q1b-If Expected Returns for two Investments $A$ and $B$ are 0.16 and 0.25
respectively with corresponding SD at 0.08 and 0.12 , which investment is
riskier? Is it right to take SD as a measure of risk?
[But SD is analytically more tractable. And if a variable is normally distributed as per assumption, its mean and SD contain all information about its probability distribution. If utility of money is a quadratic function, then $E(U)$ is a function of mean and SD.] This justifies SD. However answer on CV is more correct.

Q1c-Can systematic risk and unsystematic risk be related?
Q2a-On an SML, arrange in proper order: Foreign Govt. Bonds, Real Estate
(Personal Home), Arts\& Antiques, Coins \& Stamps, [Hint: No marks without proper naming of axes.]

Q2b- Can T Bills ever be riskier than stocks and why?
Q3-What would be the bid ask spread:

If (a) stock price is low; b-Trade volume higher; c - Less liquidity
Q4a-If cash payment received is Rs100 on an Investment but price changes are Rs48 when end price was showing Rs550, can you calculate current return, capital return and Total return?

Q4b-If total return for an Ambani equity share in 2015-16 was $15 \%$ and rate of inflation for the same year was $4 \%$, can you calculate real return?

Q5a-8.20 GS 2023 which is maturing on 3 July 2023 has coupon payment schedules on 3 January and 3 July. Six monthly interest rates starting from now to the maturity of the bond are $6.5,6.65,6.7,6.9,6.9,7.1,7.5$ and 7.9 percent per annum. If a trader wants to purchase the bond on 1st October 2019, what is the clean and dirty price of the bond? Assume the par value of bond is Rs. 100 .

Q5b-What is the 'term structure of interest rates'? Explain the economic significance of different forms of yield curve.

