

Unique Paper Code : 22417601  
Name of the Paper : Fundamentals of Investment  
Name of the Course : B.Com (Hons.) : DSE-3  
Semester : VI  
Duration : 2 hours  
Maximum Marks : 75

*(Write your Roll No. on the top immediately on receipt of this question paper)*

NOTE: Answers may be written either in English or in Hindi; but the same medium should be used throughout the paper.

Attempt four questions in all. All questions carry equal marks.

Use of simple calculators is allowed.

Q1. You have recently graduated in Finance and have been hired as a financial planner. Your boss has assigned you the task of investing Rs.1 lakh for a client who has a 1 year investment horizon. You have been asked to consider only the following investment alternatives:

1. Invest in Fixed deposits @ 8.5% return
2. Invest in tax free bonds @ 8% return
3. Invest in equity share now @ Rs 110 (Year end price:120 ). The company is expected to declare a dividend of Rs 1 per share during the year.

If the client is in 30 % tax bracket, Advice the client.

Q2. Mr. Natrajan is Vice President of Metal Works Inc. The company is considering issuing bonds to satisfy part of its financing need for a new venture of Steel Plant, which is going to be launched in Mid-Western Region of India. He knows that in the current economic scenario the Indian Financial Market is sensitive to the price and terms and condition of bond issue. The company is thinking of inviting applications for issue of bonds of the face value of Rs. 1000 redeemable after a period of 8 years at 20% premium, with variable coupon rates as; 10% for first three years; 9% for next three years and 11% for remaining two years. Determine the maximum price an intending investor , expecting a return of 11% p.a. , should pay for this bond.

Q3. Simco Ltd. is thinking of reorganization of its operation and evaluating two situations. As a part of its major reorganization of its operation, it has stated that it does not intend to pay any dividend for the next two years. In three years time it will commence paying dividend at Rs. 8 per share and the Directors have indicated that they expect to achieve dividend growth at 10% p.a. thereafter. If the reorganization does not take place, dividend will be paid in the next two years and the expected dividend growth will remain at the present level of 5% p.a. The firms cost of equity capital is 15% and will be unaffected by the reorganization. The company has just paid a dividend of Rs. 10 per share. Calculate the value of firms share in both the situation.

Q4. Mr. Rajan has Rs. 5 lakhs which he wants to invest in equity shares. He surveys the stock market and decides to invest in shares of two companies: Company X and Company Y. The following are the expected return and risk of securities “X” and “Y”

	Expected Returns	Standard Deviation
X	12%	8%
Y	8%	4%

The correlation coefficient between the returns of X and Y is -1.

He puts equal amount of his investment in “X” and “Y”. However he is not happy with the performance of the portfolio. He does not want to take any risk but also does not know how to form such a portfolio. Now advise him to form such portfolio. Also explain him how risk affects determination of required rate of return in the context of above two portfolios.

Q5. Mr. Jack approaches to you for investment advice. He is currently 55 years old and has Rs 80,000 in the bank. He has decided to invest his bank balance in a portfolio in which stocks and bonds are included. He is risk averse, he believes that risk free bond gives him 7.5% return and stocks at 15%. The variability (measured in standard deviation) in stock returns is 5%. He wants a return of 12% from this investment. How would you advise him in constructing the portfolio to meet his expectation? He also wants to know the risk involved in such a portfolio.

Q6. Mr. John buys following options from stock exchange in order to reduce risk.

Option	Strike Price (Rs.)	Nature of option	Option Premium (Rs.)
1	4400	Call	400
2	4000	Call	500
3	4600	Put	500
4	7500	Put	600
5	4500	Put	500

Now he wants to know at which market price he will be at break even point in each of the above case. If market price in each case is Rs.7200, calculate his net pay-off in each case. Help him to find out the solution of both the above problems. Also explain him, how is future contract better than forward?