

AP-266

**M.B.A. (Semester—III) Examination**

**INVESTMENT SCIENCE**

**Paper—MBA/3105/F**

Time—Three Hours]

[Maximum Marks—70

**N.B. :—** (1) Attempt **ALL** the questions.

(2) Figures to the right indicate marks.

**SECTION—A**

1. (a) What is meant by a stock exchange ? What are the functions of a stock exchange ? In what ways is a stock exchange indispensable for an economy ?

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**OR**

- (b) “Money market is a market for short term assets and deals in money and near money.”—Elucidate the statement. Also explain the various instruments of money market.

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**SECTION—B**

2. (a) Define Investment. What are objectives of an investment ?

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(Contd.)

- (b) The returns on securities A and B are given below :

Probability	Security A	Security B
0.5	4	0
0.4	2	3
0.1	0	3

Give the security of your preference and which security has to be selected on the basis of return and risk. 7

OR

- (c) "Investment is a well-grounded and carefully planned speculation." Discuss. 7
- (d) A stock costing Rs. 120 pays no dividends. The possible prices that the stock might sell for at the end of the year with the respective probabilities are :

Price (Rs.)	Probability
115	0.1
120	0.1
125	0.2
130	0.3
135	0.2
140	0.1

### SECTION—C

5. Following information has been provided to you :

Earning per share is Rs. 10

Dividends payout ratios are :

- (a) 25 percent
- (b) 50 percent
- (c) 75 percent
- (d) 100 percent

The company's capitalisation rate is 15 percent.

Calculate the price per share using Walter's model of dividend valuation when :

- (i) Internal rate of return is 20 percent. 7
- (ii) Internal rate of return is 15 percent. 7

- (i) Calculate the expected return.
- (ii) Calculate the standard deviation of return.

3. (a) "Time value of money is helpful in capital budget." Explain.
- (b) Find the present value of an income stream which provides Rs. 500; Rs. 1,000; Rs. 1,500; Rs. 2,000 and Rs. 2,500 at the end of 1, 2, 3, 4 and 5 years respectively if the interest rate is 12 percent.

OR

- (c) Compare and contrast NPV with IRR.
- (d) A firm has two investment opportunities, each costing Rs. 1,00,000 and each having an expected profit as shown below :

Year	Project A (Rs.)	Project B (Rs.)
1	50,000	20,000
2	40,000	40,000
3	30,000	50,000
4	10,000	60,000

After giving due consideration to the risk criteria in each project, the management has decided that

project. A should be evaluated at a 10 percent cost of capital and project B, a risky project with a 15 percent cost of capital.

Compute the NPV and suggest the course of action for the management if :

- (a) Both the projects are independent
  - (b) Both are mutually exclusive. 7
4. (a) How Yield to Call (YTC) is different from yield to Maturity (YTM). 7
- (b) A bond pays interest annually and sells for Rs. 835. It has six years left to maturity and a par value of Rs. 1,000. What is its coupon rate if its promised YTM is 12 percent ? (Given PVIF 12% 6 years = 0.507 and PVIFA 12% 6 years = 4.11) 7

**OR**

- (c) "Bond prices vary inversely with changes in market interest rates." Explain. 7
- (d) XYZ company issues Rs. 1000 par value bond at 12 percent. The bond is redeemable after 10 years. Determine value of bond assuming required rate of return is 14 percent.
- (Given : PVIF 14% 10 years = 0.270 and PVIFA 14% 10 years = 5.216) 7