# M.B.A. (Scmester-III) Examination <br> INVESTMENT SCIENCE <br> Paper-MBA/3105/F 

Time : Three Hours]
[Maximum Marks : 70
Note :-(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 main functions of a Stock Exchange ? In what ways is a Stock Exchange indispensable for an economy?

## OR

(b) "Development of the money market is critical for the overall growth and development of the economy". In the light of this statement discuss the significance of money market and explain the various money market instruments.

## SECTION—B

2. (a) Define the term investment. What features would you suggest to be included in the investment option?
(b) From the following information determine expected rate of return :

| Particulars | Project P |  | Project Q |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Rs. | Probability | Rs. | Probability |
| Investment (Rs.) | $2,00,000$ |  | $2,00,000$ |  |
| Return (\%) |  |  |  |  |
| Pessimistic | 21 | 0.20 | 14 | 0.20 |
| Most likely | 20 | 0.50 | 20 | 0.50 |
| Optimistic | 26 | 0.30 | 31 | 0.30 |

On the basis of calculation of expected return, suggest which project should be accepted.

## OR

(c) Define risk and distinguish between systematic and unsystematic risk.
(d) Calculate the standard deviation of retums for a stock having the following probability distribution of returns

| Possible returns | Probability |
| :---: | :---: |
| 30 | 0.10 |
| 40 | 0.30 |
| 50 | 0.40 |
| 60 | 0.10 |
| 70 | 0.10 |

3. (a) "A rational human being has a time preference for money." In the light of this statement, give reasons that may be attributed to the individual's time preference for money.
(b) Suppose you deposit Rs. 2,500 at the beginning of every year for 6 years in a saving bank account at 6 percent compound interest. What is your money value at the end of 6 years ?

## OR

(c) Compare and contrast NPV with IRR.
(d) A firm whose cost of capital is $10 \%$ is considering two mutually exclusive projects ' X ' and ' Y '. Each project requires an investment of Rs. 70,000 with the estimated life of 5 years. Cash flows are as follows :

| Year | Cash inflows |  |
| :---: | :---: | :---: |
|  | $\mathbf{X}$ | $\mathbf{Y}$ |
| 1 | 10,000 | 60,000 |
| 2 | 20.000 | 40,000 |
| 3 | 30,000 | 20,000 |
| 4 | 45,000 | 10,000 |
| 5 | 60.000 | 10,000 |

Compute NPV for the two projects. Which project would you recommend and why '? PVF@10\%.

## SECTION-C

4. (a) Discuss the nature of preference shares and explain the features that make it unique for investors.
(b) What are the main advantages to a company of raising finance by issuing the ordinary shares ?

## OR

(c) Explain the factors that influence the dividend policy of a company.
(d) Discuss in detail Walter's dividend theory.

SECTION-D
5. R.S. Sharma is considering investing in a bond and is facing following situations :
(a) R.S. Sharma owns a Rs. 1,000 face value bond with five years to maturity. The bond makes annual interest payments of Rs. 80. The bond is currently priced at Rs. 960. Given that the market interest rate is 10 percent, should R.S. Sharma hold or sell the bond ?
(b) R.S. Sharma owns a bond which 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 it coupon rate if its promised YTM is 12 percent?

