

AS-768

M.B.A. (Semester—III) Examination

INVESTMENT SCIENCE

Paper—MBA/3105/F

Time : Three Hours]

[Maximum Marks : 70

Note :— (1) Figures to the right indicate marks.

(2) Attempt **ALL** the questions.

SECTION—A

1. (a) "Investment is about earning returns. This requires a correct valuation of assets, which can be done either in absolute or relative terms." In the light of this statement describe the important investment avenues available to savers in India. 14

OR

- (b) "No investment is risk-free". In the view of this statement, explain the meaning and types of investment risk. Can this risk be eliminated or minimised ? Justify your answer. 14

SECTION—B

2. (a) Briefly trace out the history of stock markets in India. 7
- (b) Suppose ABC company issues right shares which increases the market capitalisation of shares of that company by say, Rs. 100 crores. The existing base market capitalisation (old base market capitalisation), say is Rs. 3450 crores and the aggregate market capitalisation of all the shares included in the index before the right issue is made, say Rs. 5781 crores. You are required to calculate new base market capitalisation. 7

OR

- (c) Define money market. Bring out the features of a money market. 7
- (d) The rate on particular money market instrument quoted on a discount basis is 6 per cent. The instrument has a face value of Rs. 1,00,00,000 and will mature in 71 days. What is its price ? 7

3. (a) What do you mean by time value of money ? Why does money have time value ? Explain. 7
- (b) Suppose you deposit each year starting Rs. 750, Rs. 1,000, Rs. 1,250, Rs. 1,500 and Rs. 1,750 in your saving bank account 1 to 5 years respectively. What are your deposits compound value at the end of 5 years ? Interest rate is 6 percent. 7

OR

- (c) What is IRR ? Explain the significance of IRR. 7
- (d) Green field Ltd. Bombay, has to make a choice between three possible investments project A, B and C. The immediate capital outlays for each being Rs. 1,10,000. Each will continue for 5 years and it has been decided that a discount rate of 12 percent is acceptable for all the proposals. The cash flows for the three projects are as follows :

Year	A	B	C
1	10,000	20,000	30,000
2	20,000	30,000	40,000
3	30,000	50,000	35,000
4	40,000	30,000	25,000
5	50,000	20,000	20,000

Which project would you recommend and why ? Use the NPV method as an evaluating technique. 7

4. (a) What does the term duration mean to bond investor, and how does the duration on a bond differ from its maturity ? Explain. 7
- (b) A company issued (2 years ago) 10 percent bonds with a face value of Rs. 500 for a maturity period of 6 years. Required rate of return is 10 percent. Determine the value of bond.

(Given : $PVIF_{10\%} 4 \text{ years} = 0.683$ and $PVIFA_{10\%} 4 \text{ years} = 3.170$). 7

OR

- (c) What is interest rate risk of a bond ? Explain how the risk arises. 7
- (d) ABC company issues a bond with a face value of Rs. 2,000 at 14 percent coupon rate. The bond is redeemable after 8 years. Required rate of return on this bond is 18 percent. Determine value of the bond.
- (Given : $PVIF_{18\%} 8 \text{ years} = 0.266$ and $PVIFA_{18\%} 8 \text{ years} = 4.078$). 7

SECTION—C

5. A share is currently selling for Rs. 65. The company is expected to pay a dividend of Rs. 2.50 on the share at the end of the year. It is reliably estimated that the share will sell for Rs. 78 at the end of the year.
- (1) Assuming that the dividend and price forecasts are accurate, would you buy the share to hold it for one year, if your required rate of return were 12 percent ? 7
- (2) Given the current price of Rs. 65 and the expected dividend of Rs. 2.50, what would the price have to be at the end of one year to justify purchase of the share today, if your required rate of return were 15 percent. 7

