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Name.....

Reg. No.....

**THIRD SEMESTER M.A./M.Sc./M.Com. DEGREE (REGULAR)  
EXAMINATION, NOVEMBER 2020**

(CBCSS)

M.Com.

MCM 3E (F) 01—INVESTMENT MANAGEMENT

(2019 Admissions)

Time : Three Hours

Maximum : 30 Weightage

**Section A**

*Answer at least three questions.  
Each question carries 2 weightage.  
All questions can be attended.  
Overall Ceiling 6.*

1. State the objectives of investment activity.
2. What are the different phases of portfolio management ?
3. State the principles of the Bond pricing theorem.
4. Explain the basic principles and hypotheses of Dow Theory.
5. Distinguish between active revision strategy and passive revision strategy.
6. List the assumptions of Capital Asset Pricing Model.
7. Describe the major constraints of portfolio revision.

(3 × 2 = 6 weightage)

**Section B**

*Answer at least three questions.  
Each question carries 4 weightage.  
All questions can be attended.  
Overall Ceiling 12.*

8. A chemical company paid a dividend of 2.75 during the current year. Forecasts suggest that earnings and dividends of the company are likely to grow at the rate of 8 per cent over the next five years and at the rate of 5 per cent thereafter. Investors have traditionally required a rate of return of 20 per cent on these shares. What is the present value of the stock ?

**Turn over**

9. A bond pays interest annually and sells for Rs.835. It has six years left to maturity and a par value of 1000. What is its coupon rate if it's promised YTM is 12 per cent ?

[Present value annuity factor (6 years, 12%) is 4.1114 and present value factor (6 years, 12%) is 0.5066.]

10. Write short notes on :

- Japanese candlestick charts.
- Support and resistance patterns.
- Flags and pennants.
- Exponential moving average.

11. What are the steps involved in fundamental analysis ?

12. A security pays a dividend of Rs. 3.85 and sells currently at 83. The security is expected to sell at Rs. 90 at the end of the year. The security has a beta of 1.15. The risk free rate is 5 per cent and the expected return on market index is 12 per cent. Assess whether the security is correctly priced

13. Consider the following information for three mutual funds A, B and C and the market :

|              | Mean Return (%) | SD (%) | Beta |
|--------------|-----------------|--------|------|
| A            | 12              | 18     | 1.1  |
| B            | 10              | 15     | 0.9  |
| C            | 13              | 20     | 1.2  |
| Market Index | 11              | 17     | 1.0  |

The market risk free rate was 6 per cent. Calculate the Treynor measure, Sharp measure and Jensen measures for the three mutual funds and the market index.

14. The estimates of the standard deviations and correlation co-efficients for three stocks are given below :

| Stock | SD | Correlation with Stock |        |      |
|-------|----|------------------------|--------|------|
|       |    | A                      | B      | C    |
| A     | 32 | 1.00                   | - 0.80 | 0.40 |
| B     | 26 | - 0.80                 | 1.00   | 0.65 |
| C     | 18 | 0.40                   | 0.65   | 1.00 |

If a portfolio is constructed with 15 per cent of stock A, 50 per cent of Stock B and 35 per cent of Stock C, what is the portfolio's standard deviation ?

(3 × 4 = 12 weightage)

## Section C

Answer at least two questions.

Each question carries 6 weightage.

All questions can be attended.

Overall Ceiling 12.

15. Monthly return data (in per cent) for ONGC stock and the MSE index for a 12 month period are presented below :

| Month | ONGC   | NSE Index |
|-------|--------|-----------|
| 1     | - 0.75 | - 0.35    |
| 2     | 5.45   | - 0.49    |
| 3     | - 3.05 | - 1.03    |
| 4     | 3.41   | 1.64      |
| 5     | 9.13   | 6.67      |
| 6     | 2.36   | 1.13      |
| 7     | - 0.42 | 0.72      |
| 8     | 5.51   | 0.84      |
| 9     | 6.80   | 4.05      |
| 10    | 2.60   | 1.21      |
| 11    | - 3.81 | 0.29      |
| 12    | - 1.91 | - 1.96    |

Calculate alpha and beta for the ONGC stock. Suppose NSE index is expected to move up by 15 per cent next month. How much return would you expect from ONGC ?

16. Consider a portfolio of four securities with the following characteristics :

| Security | Weight | $\alpha_i$ | $\beta_i$ | Residual Variance |
|----------|--------|------------|-----------|-------------------|
| A        | 0.2    | 2.0        | 1.2       | 320               |
| B        | 0.3    | 1.7        | 0.8       | 450               |
| C        | 0.1    | - 0.8      | 1.6       | 270               |
| D        | 0.4    | 1.2        | 1.3       | 180               |

Turn over

Calculate the return and risk of the portfolio under single index model, if the return on market index is 16.40 per cent and the standard deviation of return on market index is 14 per cent.

17. Describe briefly the important investment avenues available to savers in India.
18. "When someone refers to efficient capital markets, they mean that security or reflect all available information." Discuss.

(2 × 6 = 12 weightage)

