

## MBA in DM Sem.-3 Examination

## Investment &amp; Portfolio Mgmt.

December-2025

Time : 2.30 Hours]

[Max.Marks : 70

Q1.] Ajanta Pharma Ltd., a pharmaceutical company in the BSE Midcap Index, is currently trading at a CMP of ₹2,486 per share. The company has a market capitalisation of approximately ₹31,000 crore as of November 2025 and has historically paid generous dividends, including a dividend of ₹28 per share (D<sub>0</sub>) in FY25. [14]

Analysts expect Ajanta Pharma's dividends to grow at a high growth rate of 15% per year for the next 4 years, after which the dividend growth is expected to stabilise at a long-term rate of 6%. The company's required rate of return (r) is estimated at 12%, and the company has 12.5 crore shares outstanding. Using the two-stage Dividend Discount Model (DDM):

1. Calculate the intrinsic value per share of Ajanta Pharma Ltd.
2. Based on the intrinsic value and the CMP of ₹2,486, determine whether the stock is overvalued, undervalued, or fairly valued.
3. Compute the total intrinsic market value of the company using the intrinsic per-share value and shares outstanding.

Q2.] The stock of Blue Star Metals corrected for 10 days and reached a support zone at ₹820-₹830. [14]

On the latest trading day:

- A Bullish Engulfing pattern formed
- Volume jumped by 65%
- RSI increased from 32 to 45
- Price is still below the 200-day MA but has crossed above the 20-day MA
- Short-term trend was down, long-term trend is sideways

Questions

- a) Explain what the candlestick pattern indicates.
- b) Do volume and RSI support a reversal?
- c) Should a trader take a long position?

OR

Q2.] India's macro environment is experiencing mixed conditions: [14]

- GDP growth has moderated from 6.8% to 6.1%
- RBI has increased the repo rate by 25 bps to control sticky inflation at 5.5%
- Urban consumption remains stable, but rural demand is subdued

In the consumer durables industry, air-conditioner and refrigerator sales are rising due to heatwaves, but washing machine and TV sales are declining. Input costs such as copper and plastics have increased, while companies are pushing premiumisation to maintain margins. StarHome Appliances Ltd., a leading mid-cap consumer durable firm, posted 10% revenue growth, but its EBITDA margin declined from 13% to 10.5% due to higher raw material costs. The company has negligible debt (D/E = 0.18), strong ROE (16%), a rising export portfolio, and has just launched a smart-IoT AC range.

Questions:

- a) Analyse how current economic trends are likely to impact the consumer durables sector.
- b) Identify opportunities and risks in the sector.
- c) Assess whether StarHome Appliances Ltd. appears fundamentally strong for investment.

Q3.A] Explain the stages of the portfolio management process. How does each stage help in maximizing returns while minimizing risk for investors? [07]

Q3.B] What do you mean by market risk and unique risk? Explain both and highlight the key differences between them. [07]

OR

Q3.A] The returns of two assets under four possible states of nature are given below: [07]

State of Nature	Probability	Return on Asset 1	Return on asset 2
1	0.15	12%	9%
2	0.50	10%	11%
3	0.25	6%	5%
4	0.10	2%	-1%

- a) What is the standard deviation of the return on asset 1 and asset 2?
- b) What is the covariance between the returns on assets 1 and 2?
- c) What is the coefficient of correlation between the returns on assets 1 and 2?

Q3.B] The returns on securities 1 and 2 under five possible states of nature are given below find out covariance between security 1 and 2: [07]

State of Nature	Probability	Return On Security 1	Return On Security 2
1	0.10	-8%	6%
2	0.25	12%	10%
3	0.35	16%	18%
4	0.20	20%	14%
5	0.10	25%	11%

Q4.] Explain the theoretical foundations of CAPM and APT. Critically evaluate the strengths and weaknesses of both models and discuss situations where one model may be preferred over the other. [14]

OR

Q4.] Write Short Notes: [14]

- A. Risk-Adjusted Performance Measures (RAPM)
- B. Quantitative Trading

Q5.] Answer the following questions: (any two) [14]

- I. What trade-off does an investor face in the capital allocation decision between the risk-free asset and risky portfolio?
- II. What are the key limitations of using Sharpe or Treynor ratios for portfolio performance evaluation?
- III. How does CAPM link systematic risk to expected returns, and why is unsystematic risk ignored in the model?