

Plot No. 2, Knowledge Park-III, Greater Noida (U.P.) –201306

**POST GRADUATE DIPLOMA IN MANAGEMENT (2022-24)**  
**END TERM EXAMINATION (TERM -III)**

Subject Name: **Security Analysis and Portfolio Management**

Time: **02.00 hrs**

Sub. Code: **PGF32**

Max Marks: **40**

**Note:**

**All questions are compulsory. Section A carries 5 marks: 5 questions of 1 mark each, Section B carries 21 marks having 3 questions (with internal choice question in each) of 7 marks each and Section C carries 14 marks one Case Study having 2 questions of 7 marks each.**

**Kindly write the all the course outcomes as per your TLEP in the box given below:**

<b>CO1-</b> Identify various investment opportunities for various investors
<b>CO2-</b> Apply the concept of risk and return to calculate risk of individual security and a portfolio and perform fundamental and technical analysis for investment decision
<b>CO3-</b> Analyze and evaluate various investment options and securities for creating investment strategies
<b>CO4-</b> Design suitable portfolio for various type of investors

**SECTION - A**

Attempt all questions. All questions are compulsory.

**1×5 = 5 Marks**

<b>Questions</b>	<b>CO</b>	<b>Bloom's Level</b>
<b>Q. 1: (A).</b> What are the best investment options for the retired person?	CO-1	L-3
<b>Q. 1: (B).</b> How does asset allocation contribute to risk diversification in an investment portfolio?	CO-1	L-3
<b>Q. 1: (C).</b> Provide examples of alternative investments and discuss their potential benefits and risks	CO-1	L-3
<b>Q. 1: (D).</b> Describe the role of an investment manager in the context of portfolio management	CO-1	L-2
<b>Q. 1: (E).</b> Discuss the various types of investment alternatives available to investors	CO-1	L-2

**SECTION – B**

All questions are compulsory (Each question have an internal choice. Attempt any one (either A or B) from the internal choice)

**7 x 3 = 21 Marks**

<b>Questions</b>	<b>CO</b>	<b>Bloom's Level</b>
<b>Q. 2: (A).</b> Who are the main participants of new issue markets and how do they help the company to issue their share in primary market?	CO-1	L-4
<b>Or</b>		
<b>Q. 2: (B).</b> How are primary markets different from secondary markets? How does NIFTY work and how is it calculated? How does NIFTY compare to other indices around the world?	CO-1	L-4
<b>Q. 3: (A).</b> In the context of equity analysis and investment decision-making, compare and contrast the principles, methodologies, and objectives of fundamental analysis and technical analysis. Provide specific examples of the types of indicators and tools used in each approach, and discuss the strengths	CO-2	L-5

and weaknesses of each method in predicting stock price movements and informing investment strategies.

**Or**

**Q. 3: (B).** Suppose you are an analyst conducting a fundamental analysis of a company called HealthWave Pharmaceuticals, which specializes in the research and development of innovative drugs for various critical diseases. The following financial data has been provided for the most recent fiscal year (all figures in USD millions)

Total Revenue: \$1,500

Cost of Goods Sold (COGS): \$600

Research & Development (R&D) Expenses: \$350

Selling, General, & Administrative (SG&A) Expenses: \$200

Interest Expense: \$50

Tax Rate: 25%

Shares Outstanding: 100 million

Calculate HealthWave Pharmaceuticals' Earnings per Share (EPS) for the most recent fiscal year. Based on this information, what insights can you provide about the company's profitability and financial performance?

**Q. 4: (A).** Consider following information for three mutual funds, A, B and C and the market. The mean risk free rate was 7 %. Calculate the Treynor measure, Sharp measure, and Jensen measure for the three mutual funds and the market index. Which Mutual Fund is better for Risk Averse Investors?

Mutual funds	Mean Return (%)	Standard Deviation (%)	Beta
P	13	18	0.9
Q	15	22	1.1
R	17	26	1.2
Market Index	14	18	1.0

**Or**

**Q. 4: (B).**

As part of a portfolio management course, you are asked to analyze the performance of an active investment strategy versus a passive investment strategy. You have been provided with the following information for a five-year investment period:

The annual returns of an actively managed portfolio are as follows:

Year 1: 12% Year 2: 20% Year 3: -5% Year 4: 15% Year 5: 8%

The annual returns of a passively managed index fund that tracks the S&P 500 are as follows:

Year 1: 10% Year 2: 15% Year 3: 3% Year 4: 12% Year 5: 7%

The management fees for the actively managed portfolio are 2% of the assets under management per year, whereas the management fees for the passively managed index fund are 0.1% per year.

Based on the provided information, calculate the following for both investment strategies:

a. The compound annual growth rate (CAGR) of the returns, net of fees, over the five-year investment period.

b. The cumulative returns, net of fees, for a \$100,000 initial investment over the five-year investment period.

Based on your calculations, which investment strategy performed better over the given time frame, and what are the main factors that contributed to the

CO-2

L-5

CO-4

L-5

CO-4

L-5

difference in performance			
<b><u>SECTION - C</u></b>			
Read the case and answer the questions		<b>7×02 = 14 Marks</b>	
<b>Questions</b>		<b>CO</b>	<b>Bloom's Level</b>
<p><b>Q. 5: Case Study:</b>  TechTitan Technologies is a leading multinational technology company that specializes in the development and manufacturing of consumer electronics, software, and online services. The company's product portfolio includes smartphones, computers, tablets, smartwatches, and a range of software applications and cloud-based services.  As of the end of the last fiscal year, TechTitan Technologies reported the following financial data (all figures in USD millions):</p> <p>Revenue: \$280,000  Net Income: \$55,000  Earnings per Share (EPS): \$11.00  Number of Shares Outstanding: 5,000  Dividends per Share: \$2.5  Market Capitalization: \$1,000,000</p> <p>Additionally, the technology industry's average Price-to-Earnings (P/E) ratio is 25X.</p> <p><b>Q. 5(A):</b> Calculate TechTitan Technologies' current Price-to-Earnings (P/E) ratio. How does it compare to the industry average, and what are the possible implications of this comparison?</p> <p><b>Q. 5(B):</b> Assuming TechTitan Technologies' net income is expected to grow at a constant rate of 8% per year over the next five years, and the industry average P/E ratio remains constant, what would be the projected market capitalization of TechTitan Technologies at the end of year five? How does this compare to the current market capitalization, and what are the possible implications of this comparison?</p>			
		CO-3	L-5
		CO-3	L-5

**Kindly fill the total marks allocated to each CO's in the table below:**

<b>COs</b>	<b>Marks Allocated</b>
<b>CO1</b>	12 Marks
<b>CO2</b>	07 Marks
<b>CO3</b>	14 Marks
<b>CO4</b>	07 Marks