Innovative Teaching–Learning Practices Adopted for Continuous Evaluation (CE)

(NBA SSR – Criterion 3: Teaching–Learning Processes)

Innovative Teaching–Learning Methods Adopted

Course Name: Security Analysis and Portfolio Management (FN 301)

Faculty Name: Dr. Tushar Panigrahi

Programme: PGDM (Finance)

Semester: III

Assessment Component: Continuous Evaluation (CE)

As part of the Continuous Evaluation (CE) component of the Security Analysis and Portfolio Management (SAPM) course, a total of 20 distinct project assignment topics were designed and offered to students, covering Fundamental Analysis, Efficient Market Hypothesis (EMH), Equity Valuation, and Portfolio Evaluation, all based on Indian capital market data.

Each project topic was assigned in a unique manner, either by allocating different companies, sectors, indices, or market events to individual students or groups. As a result, 100% of the student projects were unique in terms of stock selection, data set, event window, or analytical focus, even when the broad theme remained similar. This ensured zero duplication of projects, promoted independent analysis, and significantly reduced the scope for plagiarism, thereby strengthening originality, inquiry-based learning, and outcome attainment.

1.1 Description of the Innovative Pedagogy

To strengthen outcome-based learning and industry relevance, the course Security Analysis and Portfolio Management (SAPM) adopted an innovative, project-centric pedagogy as part of Continuous Evaluation (CE).

Instead of conventional written assignments, students were engaged in unique, Excel-based, research-oriented project assignments using real Indian stock market data. The pedagogy emphasized experiential learning, financial analytics, and empirical testing of capital market theories, particularly Fundamental Analysis and Efficient Market Hypothesis (EMH).

This approach aligns with Outcome-Based Education (OBE) framework, ensuring measurable attainment of Course Outcomes (COs), Programme Outcomes (POs), and Programme Specific Outcomes (PSOs).

1.2 Nature of Innovation Introduced

The following innovative elements were introduced in CE:

a) Real-Time Market Data Usage

Students sourced live and historical data from:

- BSE India
- NSE India
- Yahoo Finance

This exposed learners to actual market volatility, pricing behaviour, and financial disclosures, enhancing realism in learning.

b) Excel-Based Financial Analytics

All project solutions were mandatorily executed using **MS Excel**, involving:

- Financial ratio computation
- Equity valuation models (DDM, FCFF, Relative Valuation)
- Regression analysis for Beta and CAPM
- Event study methodology for EMH testing
- Portfolio performance evaluation

This ensured strong alignment with PO5 (Modern Tool Usage).

c) Empirical Testing of Efficient Market Hypothesis

Special emphasis was placed on testing Weak and Semi-Strong Form EMH through:

- Random Walk Hypothesis
- Runs Test
- Autocorrelation Analysis
- Event Studies (earnings announcements, stock splits, mergers, Union Budget impact)

Students moved beyond theoretical understanding and validated financial theories empirically, developing higher-order analytical skills.

d) Unique and Individualized Project Topics

Each student (or group) was assigned a distinct stock, sector, or market event, ensuring:

- Originality in work
- Independent thinking
- Prevention of duplication and plagiarism

From an employability perspective, this innovative, project-based pedagogy significantly enhances students' job readiness in finance and analytics roles. By working with real Indian stock market data and performing hands-on valuation, risk analysis, EMH testing, and portfolio evaluation using MS Excel, students develop industry-relevant technical competencies that are

directly aligned with roles such as equity research analyst, investment analyst, portfolio analyst, risk analyst, and financial data analyst. Exposure to tools like regression analysis, event studies, and valuation models enables students to demonstrate practical proficiency during interviews and assessments, moving beyond theoretical knowledge to evidence-based financial decision-making.

Additionally, the pedagogy cultivates transferable professional skills highly valued by employers, including analytical thinking, problem-solving, data interpretation, and independent research capability. The requirement to interpret results, draw managerial insights, and justify investment decisions mirrors real-world expectations in investment firms, banks, consulting organizations, and fintech companies. Students also gain confidence in handling unstructured data, meeting deadlines, and presenting analytical findings—competencies that improve workplace adaptability, professional credibility, and long-term career growth in the competitive financial services industry.

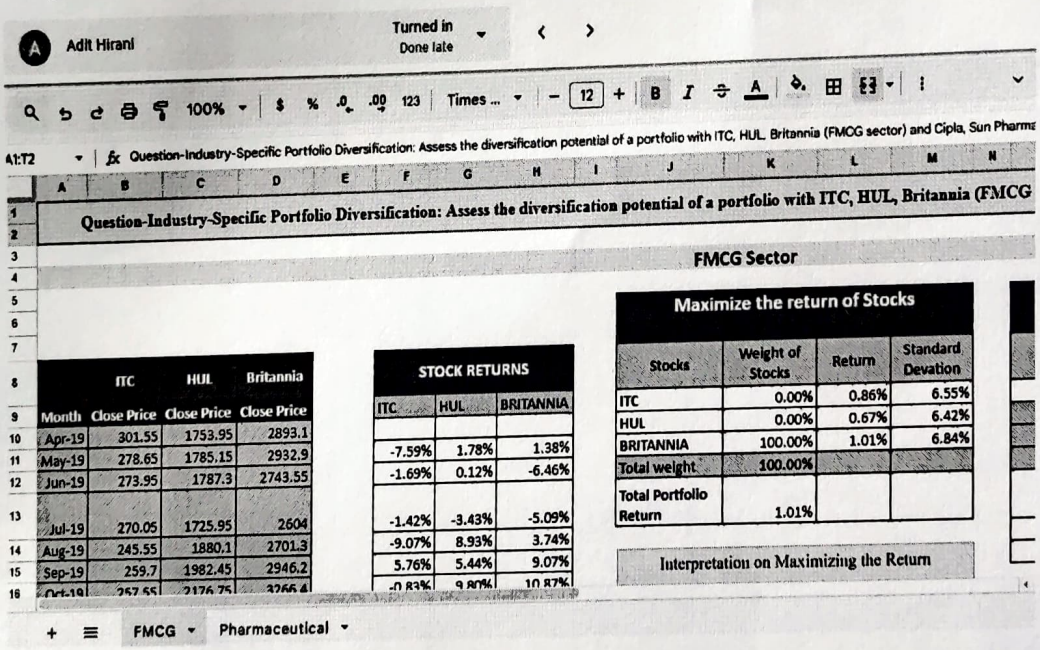
Course Outcomes (COs)	PO1: Disciplinary Knowledge	PO2: Problem Analysis	PO3: Communication	PO4: Investigative Skills	PO5: Modern Tool Usage
CO1: Classify investment instruments with respect to risk and return	3	2	1	–	2
CO2: Evaluate risk and return using portfolio theories	3	3	1	2	3
CO3: Evaluate Capital Market Theory and its applications (CAPM, EMH)	3	3	1	3	3
CO4: Assess equity value using valuation techniques	3	3	1	2	3
CO5: Evaluate portfolio performance and revision strategies	3	3	1	2	3

Course Outcome (CO) Mapping

Course Outcome	Pedagogical Contribution
CO1: Classify investment instruments	Real-time comparison of Indian securities using Excel
CO2: Evaluate portfolios using modern portfolio theory	Portfolio construction, risk-return analysis, beta estimation
CO3: Evaluate Capital Market Theory	Empirical testing of CAPM, EMH using market data
CO4: Assess equity value	Fundamental valuation models (DDM, FCFF, relative valuation)
CO5: Evaluate portfolio performance	Sharpe ratio, portfolio revision, performance metrics

Snapshot of one Project assignment.

Assignment-SAPM



Adit Hirani — Turned in, Done late

A1:T2 — Question-Industry-Specific Portfolio Diversification: Assess the diversification potential of a portfolio with ITC, HUL, Britannia (FMCG sector) and Cipla, Sun Pharma

Question-Industry-Specific Portfolio Diversification: Assess the diversification potential of a portfolio with ITC, HUL, Britannia (FMCG

FMCG Sector

	ITC	HUL	Britannia
Month	Close Price	Close Price	Close Price
Apr-19	301.55	1753.95	2893.1
May-19	278.65	1785.15	2932.9
Jun-19	273.95	1787.3	2743.55
Jul-19	270.05	1725.95	2604
Aug-19	245.55	1880.1	2701.3
Sep-19	259.7	1982.45	2946.2
Oct-19	267.55	2176.75	3266.4

STOCK RETURNS		
ITC	HUL	BRITANNIA
-7.59%	1.78%	1.38%
-1.69%	0.12%	-6.46%
-1.42%	-3.43%	-5.09%
-9.07%	8.93%	3.74%
5.76%	5.44%	9.07%
-0.83%	9.80%	10.87%

Maximize the return of Stocks

Stocks	Weight of Stocks	Return	Standard Devation
ITC	0.00%	0.86%	6.55%
HUL	0.00%	0.67%	6.42%
BRITANNIA	100.00%	1.01%	6.84%
Total weight	100.00%		
Total Portfolio Return	1.01%		

Interpretation on Maximizing the Return

FMCG | Pharmaceutical