Question 1: Answer both Part A and B
Question 2: Answer all three questions
Questions 3-7: Answer two questions from each of five questions

To pass the exam, you must acquire a minimum mark of 65 out of 100 possible points.

Question 1: Part A and Part B (Required)
Maximum 40 points

Question 1. Part A (Note: Chart annotations are a very important part of your analysis. Trend lines, Pattern etc. should be carefully drawn and labeled.)

Charts 1 through 7 are charts of the S&P 500. Charts are for different time frames.
1. Analyze these charts from a **long-term, intermediate-term and short-term perspective.** Include the following in your analysis and recommendations. All recommendations must be supported with the use of:
   o Trends from different time frames, support/resistance levels, signs of weakness/strength, as well as indicators and moving averages included on the charts.
   o Your expectation and recommendations regarding the future direction of this market including short, intermediate and long-term views. Your answer should be well supported with acceptable technical analysis.
   o What are your recommendations for both long and short-term clients. Please explain your trading tactic and money management technique for those who have exposure in the market, and those who are completely out of the market.

Part B: (Note: Please keep in mind, that there is not one single, "absolute", correct answer when reallocating the weight percentages of the underlyings. Marks will be awarded for your clear argumentation.)

2. **An investor has the following weights in his portfolio:**
   o S&P 500 (Equity): 20%
   o Gold: 25%
   o Oil: 15%
   o T-Note: 40%

Based on Charts 8 through 13 and their attached indicators, what do you recommend the investor to do? Your answers should include the following:

   o A brief analysis on these different markets (S&P, Gold, Oil, T-Note)
   o An explanation of what markets should be over weighted, and what markets should be underweighted. You must mention the reasons for your re-allocations.
   Important Note: All indicators are calculated on the RS curves not on the real prices

* Please start each answer on a fresh sheet of paper

Question #2

Answer all three questions (Required)

Maximum 10 Points

Question 2. (ANSWER ALL THREE QUESTIONS)

1. Three of the most popularly used technical analysis indicators are MACD, Stochastics and the RSI. As a professional technical analyst, you should be well aware of the calculations of these indicators. Explain in detail the calculation of these three indicators. (4 points)

2. Please define "Market Sentiment" and provide three (3) examples of measures of Market sentiment and how they are used. (3 points)

3. The chart below is a daily chart of a market index in a Middle East country. Please turn this chart into a point and figure chart using the "close" tactic. Please use a box size of 50, and a reversal criteria of 3. To keep it relatively simple, we recommend using the empty chart to draw your point and figure chart.   (3 points)

* Please start each answer on a fresh sheet of paper

* Please start each answer on a fresh sheet of paper

Questions 3-7

Answer TWO questions from each question (Required)

Maximum 50 points (5 points for each question)

Question 3. (ANSWER TWO QUESTIONS)

1. Explain a long-term trading tactic, using price action, along with the MACD indicator and the +DI, and –DI curves from the DMI system. Your investment strategy should include the signals that will trigger a long-term buy signal, and how will you get out of your long-term position. (5 points)

2. Price gaps that appear during a strong upward move are very significant. Some of them are bullish, as they signal the beginning of the move, while others hint that the upward move will continue, while other gaps are bearish as they appear at the end of the move. Please explain this statement, stating which gaps appear in the beginning, middle, and end of the move. (5 points)

3. A Point and Figure chart has no time scale but it is still considered a two-dimensional chart, which is similar to bar and line charts. Explain. (5 points)

Question 4. (ANSWER TWO QUESTIONS)

1. Explain the similarities between a triple top and a descending triangle that appears after an uptrend. Explain how prices are expected to move, as well as how to calculate the price target in both formations. (5 points)

2. Explain how a Dow Theory sell signal and a breadth sell signal are similar? (5 points)

3. Some mainstream observers argue that the Elliott Wave Principle can be highly subjective, and traditionally exhibits greater success as a confirmation overlay, rather than a predictive tool. Explain your view, with examples of how practitioners can improve the reliability of this model. (5 points)

Question 5. (ANSWER TWO QUESTIONS)

1. Explain why a bullish engulfing pattern and a shooting star are stronger formations than the piercing pattern and the hanging man. Your answer should include the psychology of such formations. (5 points)

2. What is the commitment of Traders (COT) Report and how is it used by traders and investors? (5 points)
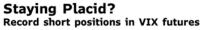
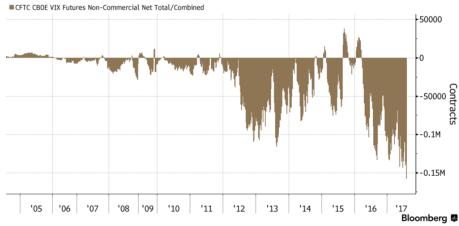* Please start each answer on a fresh sheet of paper

3. Two popular market breadth indicators are giving conflicting signals. The % of stocks making new 4-week highs is very weak, but a much greater % of stocks are holding above their 200-day averages. Describe the probable market condition and stage of the cycle, while suggesting a viable strategy. (5 points)

Question 6. (ANSWER TWO QUESTIONS)

1. Please describe three measures of breadth. Explain how they are used and how successful these indicators have been in determining the future direction of the markets or issue being studied. (5 points)

2. Edgar Lawrence Smith presented the notion of a ten-year stock market cycle in his book "Tides and the Affairs of Men" (1939). The cycle has since been popularly referred to as the *decennial pattern.* Which year in the decade is statistically proven to yield the most positive average return in the stock market and what does the same probabilistic roadmap suggest for the remaining part of 2017, coupled with traditional seasonality trends? (5 points)

3. A Bloomberg journalist reports "The number of short positions on VIX futures has hit a fresh peak, and an exchange-traded fund that benefits when volatility falls just saw its biggest weekly inflows [in several months], following three weeks of withdrawals. What might be driving investors to keep shorting volatility and what does this extreme calm potentially signal about the market? (5 points)
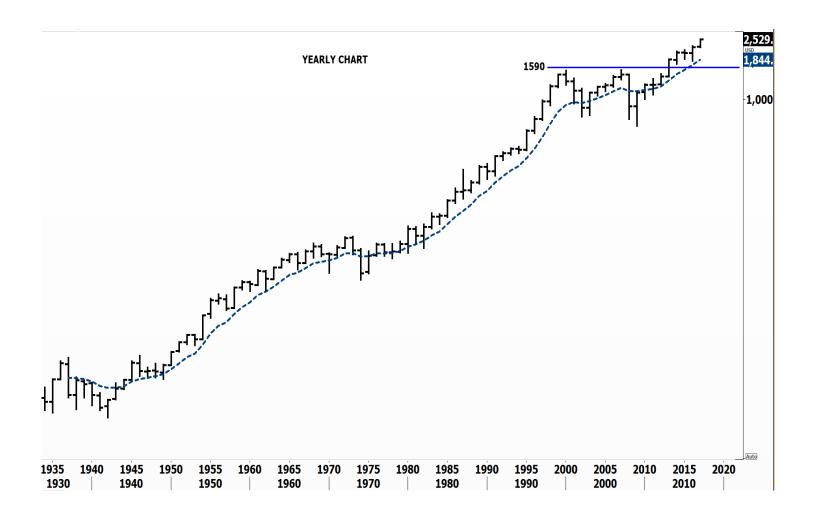

Staying Placid?
Record short positions in VIX futures

* Please start each answer on a fresh sheet of paper
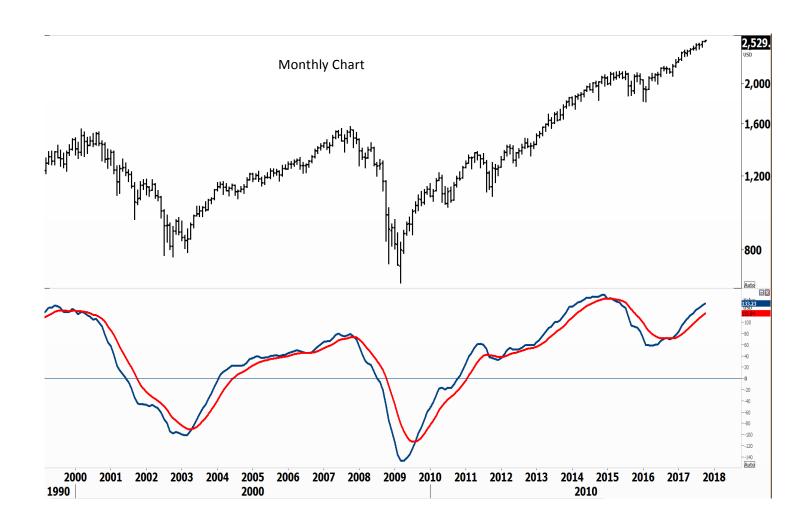
Question 7. (ANSWER TWO QUESTIONS)

1. Relative strength analysis is a very useful tool that helps investors to pick the best stocks. Explain how we calculate this indicator, and the advantages that this indicator possesses over momentum indicators. (It is important to note that relative strength analysis is not the RSI indicator that was created by Welles Wilder.) (5 points)

2. In market profile, what is a neutral day and when does it unfold? (5 points)

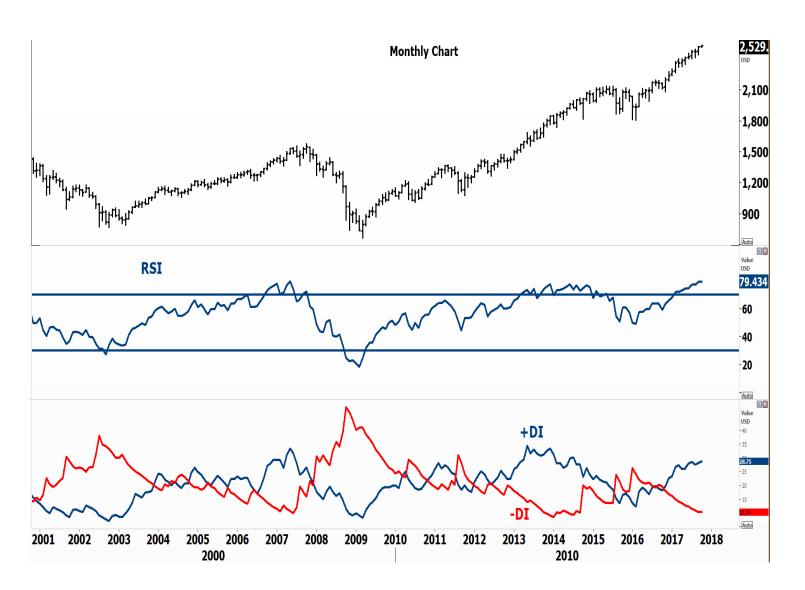3. Explain how to calculate the NT Projection downward target in Ichimoku charts. (5 points)

* Please start each answer on a fresh sheet of paper

Chart 1

YEARLY CHART

1590

2,529.
USD
1,844.
1,000

| | | | | | | | | | | | | | | | | | |
1935 1940 1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015 2020
1930   1940   1950   1960   1970   1980   1990   2000   2010

Yearly Chart: log scale

10 years Moving Average

Chart 2

Monthly Chart

Monthy Chart: log scale

MACD (12,26,9)

Chart 3

Monthly Chart

2,529.
USD

2,100

1,800

1,500

1,200

900

Auto

RSI

Value
USD

79.434

60

40

20

Auto

Value
USD
40

35

+DI

28.75
25

20

15

-DI

10.14

Auto

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

2000   2010

Monthly Chart: Arithmetic scale

RSI (14 periods)

+DI / -DI from the DMI System

Chart 4

Weekly Chart: Arithmetic scale

Bollinger Bands: 20 week SMA + 2 St. Dev

MACD: (12,26,9)

Chart 5

Weekly Chart: Arithmetic scale

CCI   (20 weeks)
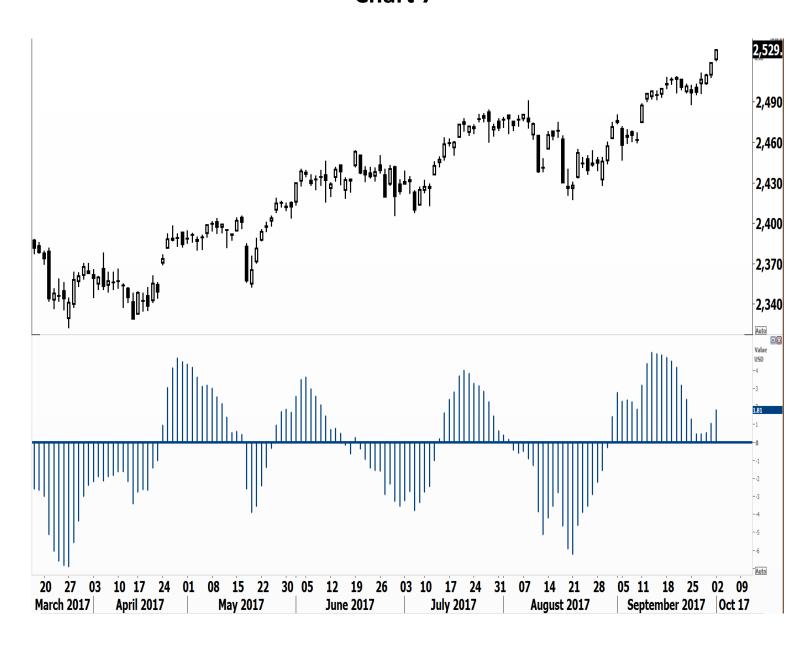
Stochastic Oscillator: (9,5,3)

Chart 6

Daily Chart: Arithmetic scale

Stochastic Oscillator: (9,5,3)

Momentum Oscillator (14 periods)

Chart 7

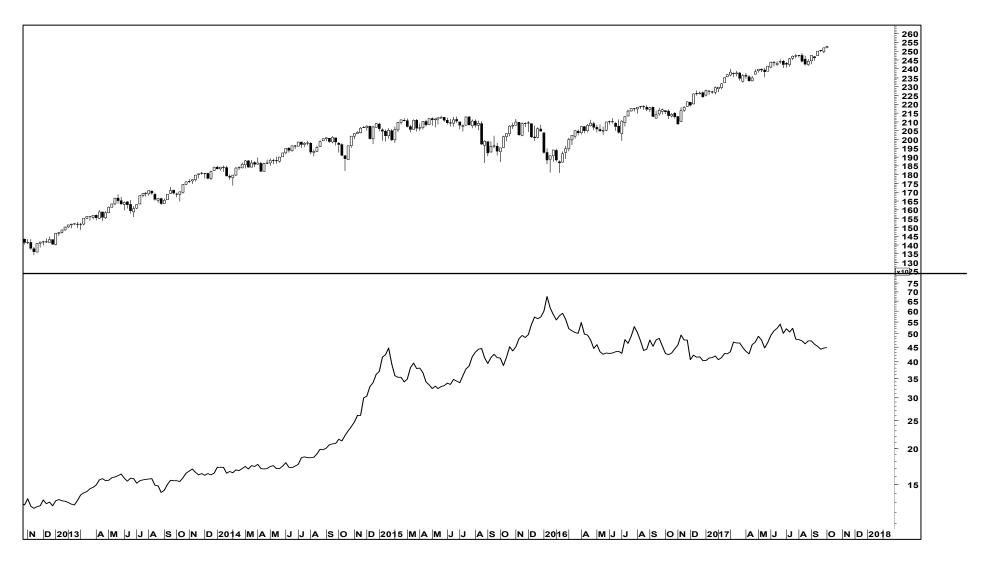**Daily Chart: Arithmetic scale**

MACD Histogram

Chart 8

Upper Window: S&P 500 Index – Weekly Bar Chart – Normal Scale
Middle Window: S&P 500 Index vs. 10-Year UST-Note RS line w/100 Week Weighted MA – Normal Scale
Lower Window: MACD of the S&P 500 Index vs.10-Year UST-Note RS line – Normal Scale
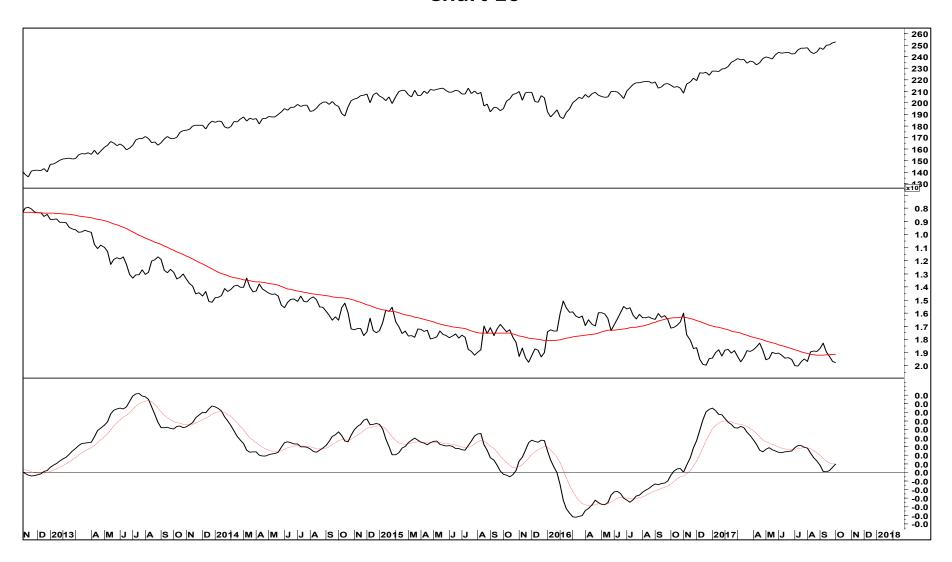
Chart 9

S&P 500 Index
Upper Window: S&P 500 Index – Weekly Candlestick Chart – Normal Scale
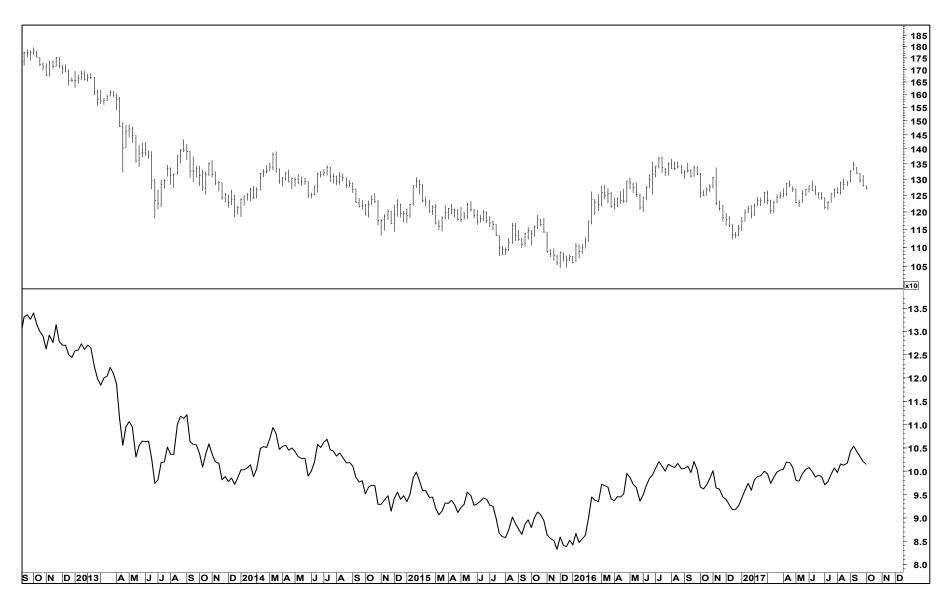**Lower Window: S&P 500 Index vs. European Dated Brent (BFOE) RS line – Semi-log. Scale**

Chart 10

S&P 500 Index
Upper Window: S&P 500 Index – Weekly Line Chart – Normal Scale
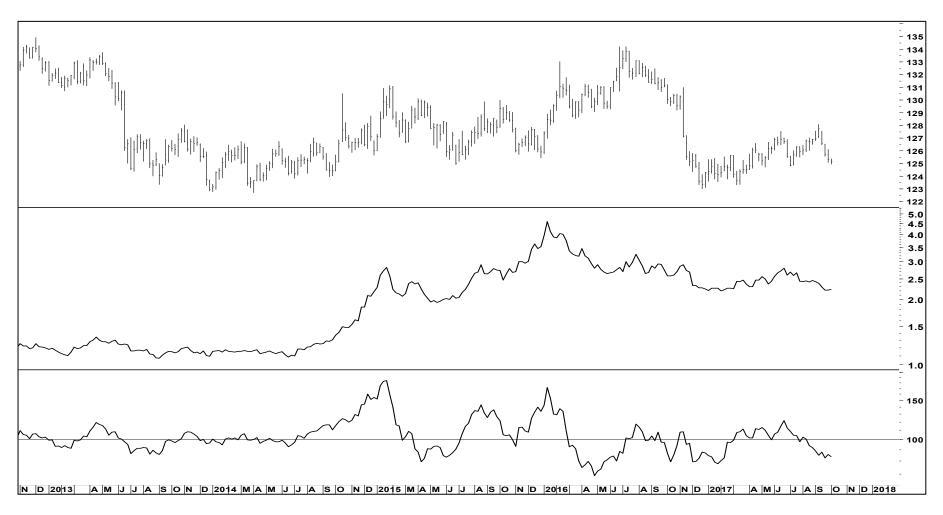**Middle Window: S&P 500 Index vs. Gold RS line w/40 Week SMA – <u>Inverted</u> Normal Scale**
Lower Window: MACD of the S&P 500 Index vs. Gold RS line – Normal Scale

Chart 11

Gold
Upper Window: Gold– Weekly Bar Chart – Semi-Log. Scale
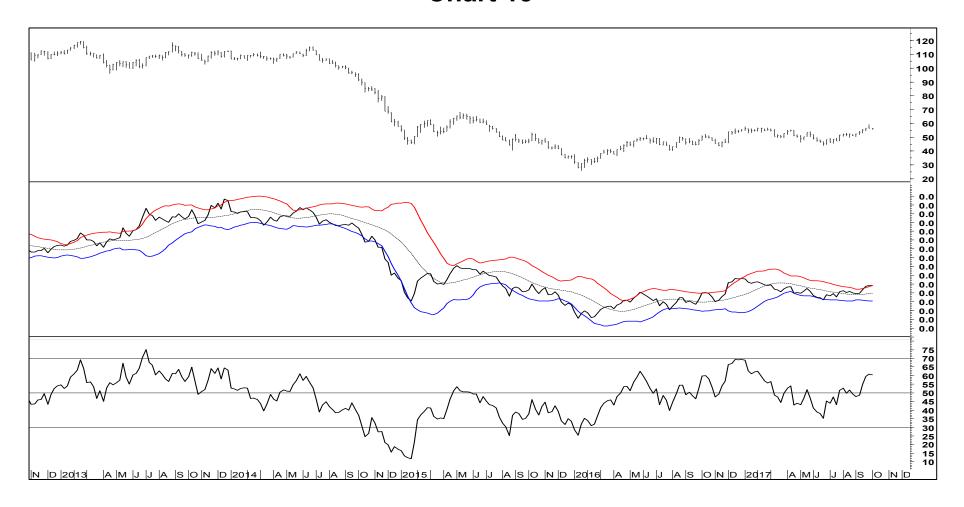**Lower Window: Gold vs. 10-Year UST-Note RS line – Normal Scale**

Chart 12

10-Year UST-Note
Upper Window: 10-Year UST-Note – Weekly Bar Chart – Normal Scale
Middle Window: 10-Year UST-Note vs. European Dated Brent (BFOE) RS line – Semi-log. Scale
Lower Window: Relative Strength Index (RSI) of the 10-Year UST-Note vs. European Dated Brent (BFOE) RS line –
Normal Scale

Chart 13

Brent Spot
Upper Window: European Dated Brent (BFOE) – Weekly Bar Chart – Normal Scale
Middle Window: European Dated Brent (BFOE) vs.Gold RS line w/Bollinger Bands (20 Week SMA/2 Stdev.) – Normal Scale
Lower Window: Relative Strength Index (RSI) of the European Dated Brent (BFOE) vs. Gold – Normal Scale