Part 1: Analysis of Funds

First, we need to analyze the three investment funds (Fund A, Fund B, and Fund C) based on Mr. X's risk profile and the market conditions:

1. Fund A:
- Asset Allocation: Debt 50%, Equity 30%, Futures & Options 20%
- Risk Score: 40/100
- Given that Mr. X has become more risk-neutral (47/100), Fund A might be too conservative for him.

2. Fund B:
- Asset Allocation: Equity 40%, Debt 40%, Futures & Options 20%
- Risk Score: 55/100
- Fund B seems to be aligned with Mr. X's increased risk tolerance, but it's not the highest risk option available.

3. Fund C:
- Asset Allocation: Equity 40%, Debt 30%, Futures & Options 30%
- Risk Score: 65/100
- Fund C is the highest risk option and may suit Mr. X's current risk-neutral stance.

Part 2: Optimal Investment Strategy

Considering that Mr. X wants to allocate 20% to each asset class (equity, debt, and futures & options), and that he aims for a return between 15% - 18%, we need to determine how much return he can expect from each asset class. The remaining return will need to come from futures & options.

1. Equity:
- Expected Return: 13.5%
- Allocation: 20%
- Contribution to Total Return: 13.5% * 20% = 2.7%

2. Debt:
- Expected Return: 7%
- Allocation: 20%
- Contribution to Total Return: 7% * 20% = 1.4%

To achieve a return between 15% - 18%, we need the remaining return from futures & options:

Desired Return Range: 15% - 18%
Contributions from Equity and Debt: 2.7% + 1.4% = 4.1%

Remaining Return Required from Futures & Options: (15% - 4.1%) to (18% - 4.1%) = 10.9% to 13.9%

Part 3: Suggested Mutual Funds

For the debt and equity segments, we can consider the following mutual funds for Mr. X:

1. Debt Mutual Fund: SBI Magnum Gilt Fund - Historical 5-year return: 8.5%
- Allocation: 10%
- Reason: SBI Magnum Gilt Fund has a good historical return and is managed by an experienced fund manager, Mr. Navneet Munot.

2. Equity Mutual Fund: HDFC Equity Fund - Historical 5-year return: 16.2%
- Allocation: 10%
- Reason: HDFC Equity Fund has consistently delivered good returns and is managed by Prashant Jain, a seasoned fund manager.

Part 4: Futures & Options Allocation

Given that Mr. X needs to achieve an additional return of 10.9% to 13.9% from futures & options, the percentage of the portfolio value allocated to this category depends on the expected returns and risk. To manage risk and align with Mr. X's risk-neutral stance, it is advisable to allocate around 10% to futures & options.

Expected Return: It's challenging to predict specific returns in the volatile futures & options market, but Mr. X can target returns within the required range by employing various strategies and carefully managing risk.

In conclusion, for Mr. X's risk-taking appetite and investment objectives, Fund C with a 65/100 risk score and a higher allocation to equities and futures & options seems to be the most suitable choice. The optimal investment strategy would include 20% each in equity, debt, and futures & options, and the use of specific mutual funds with historical returns as mentioned above.