1705N507

Candidate's Seat No :_____

MSc. IT (FIN) Sem.-2 Examination

FITMSC - 09

Risk Management in Fin. Tech.

Time : 2-30 Hours] May-2025 [Max. Marks : 70

Instructions:

- **Figures to the right indicate Full Marks.**
- **Do not write anything on the question paper.**
- **Simple calculator is allowed. Do not use a scientific calculator.**

Q.1 **A speculator bought two future contracts of Corn on day 1, and sold them on day 7. He again sold two contracts on day 8 and bought them on day 10. Each Contract consists of 5000 bushels. The settlement price of wheat bushels during 10 trading days is shown below. The initial and maintenance margins to be deposited with the clearing house are $400 and $400 respectively. The speculator has already deposited $100 with the broker. Given the data, prepare the daily gains and loss tables along with the equity and margin account table.** **20**

Days	Settlement Price
1(Bought 2 Contracts)	225
2	228
3	230
4	227
5	223
6	225
7(Sold 2 Contract)	229
8(Sold 2 Contract)	233
9	236
10(Bought 2 Contracts)	239

(P.T.O)

<table>
<tr><td></td><td>What is the amount of profit/loss made by the speculator?</td><td></td></tr>
<tr><td>Q.2</td><td>How Derivative Contracts help to manage or to hedge the risk? Explain in detail.</td><td>10</td></tr>
<tr><td>Q.3</td><td>A) Explain Cut-off rate with an example.
OR
B) Explain bull with call option strategy</td><td>15

15</td></tr>
<tr><td>Q.4</td><td>Explain Risk Management with its process.</td><td>10</td></tr>
<tr><td>Q.5</td><td>Consider the key statistical results on the following close ended mutual funds which are actively traded in the market.
<table>
<tr><th>Funds</th><th>Alpha</th><th>Beta</th><th>Residual(Variance)</th></tr>
<tr><td>A</td><td>3.72</td><td>0.99</td><td>9.35</td></tr>
<tr><td>B</td><td>0.60</td><td>1.27</td><td>5.92</td></tr>
<tr><td>C</td><td>0.41</td><td>0.96</td><td>9.79</td></tr>
<tr><td>D</td><td>(0.22)</td><td>1.21</td><td>5.36</td></tr>
<tr><td>E</td><td>0.45</td><td>0.75</td><td>4.52</td></tr>
</table>
The market has given a return of 13.5% with a risk of 25%. The 364-day T-bill rate is 7%. Now:
Calculate the Sharpe's measure of performance and rank them</td><td>15</td></tr>
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