## 12. INVESTMENT OBJECTIVES, STRATEGIES AND ISSUES

1. You are provided with a database containing monthly values for three funds A, B and C over a two-year period, as well as equivalent values for the FTSE-100 index. Assume the risk-free rate has remained static at $6.0 \%$ for the whole period. Note that trustee's suggested betas for each fund are 0.75 for fund A and 1.00 for fund B and C ..
(a) Analyse the performance of each fund over the two-year period and subperiods of one year and explain why you believe one fund is better or worse than the others. Comment upon the apparent style of management of each fund. [You should calculate the (compound) average return and standard deviation of returns for the index and each fund for each period, together with the Sharpe and Treynor risk adjusted performance measures. In addition, calculate the incremental return of each fund over its passive equivalent portfolio with the same beta].
(b) Further analyse the performance of each fund into its respective components and provide an explanation of this as to a would-be investor. Comment upon the differential skills of the three managers.

| PERIOD | INDEX | $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ |
| ---: | ---: | ---: | ---: | ---: |
| 0 | 6000 | 100 | 100 | 100 |
| 1 | 6056 | 100.95 | 100.8 | 101.45 |
| 2 | 6020 | 100.47 | 100.09 | 100.36 |
| 3 | 6186 | 104.08 | 101.3 | 104.6 |
| 4 | 6485 | 106.32 | 108.99 | 109.87 |
| 5 | 6300 | 104.24 | 110.52 | 107.89 |
| 6 | 6672 | 107.63 | 113.39 | 116.38 |
| 7 | 6510 | 107.03 | 109.54 | 111.92 |
| 8 | 6425 | 106.81 | 108.99 | 109.9 |
| 9 | 6723 | 110.67 | 111.78 | 114.51 |
| 10 | 6720 | 111.36 | 112.54 | 113.06 |
| 11 | 6810 | 112.61 | 114.93 | 115.78 |
| 12 | 6990 | 116.77 | 121.48 | 122.39 |
| 13 | 7164 | 120.11 | 122.94 | 126.97 |
| 14 | 7385 | 123.43 | 125.89 | 131.54 |
| 15 | 7354 | 123 | 124.3 | 130.36 |
| 16 | 7685 | 128.62 | 128.28 | 137.02 |
| 17 | 7890 | 132.83 | 130.2 | 140.66 |
| 18 | 7756 | 129.32 | 128.77 | 140.32 |
| 19 | 7798 | 130.02 | 130.01 | 141.81 |
| 20 | 7210 | 123 | 123.25 | 131.64 |
| 21 | 7120 | 122.5 | 124.11 | 131.33 |
| 22 | 7255 | 124.82 | 128.07 | 136.84 |
| 23 | 7300 | 126.2 | 130.38 | 140.78 |
| 24 | 7400 | 127.5 | 131.63 | 142.88 |

