1 Which of the following is a good example of adverse selection?
(a) A person in poor health conditions seeks to get health coverage from an insurer
(because "bad risks" are more active in seeking counterparts)

2 A downward sloping yield curve is usually associated with an expected…
(c) reduction in short term interest rates
(because of CB's or market corrections, this is typically a short term shock)

3 Which of the following represents evidence supporting the efficient market hypothesis?
(b) Mutual funds that overperformed last year are unlikely to remain overperformers
(because this is consistent with overperformance being random)

4 In money markets worldwide the larger volumes are found in the following segment:
(a) secured transactions
(after 2007-09, most part of the market turned to secured transactions, still more than derivatives)

5 Many corporate bonds are callable. This means that…
(d) the issuer can redeem them before maturity
(as in a call option, the holder can choose to buy the underlying)

6 When interest rates are rising significantly, what kind of stock usually loses the most value?
(b) growth stocks
(those relying more on the present value of a future large price, rather than on flows)

7 The domestic currency tends to appreciate in the short-term if a decrease occurs in…
(b) imports from abroad relative to exports
(less imports means less demand for foreign currencies)

8 One of the leading assets of a commercial bank is represented by…
(d) government bonds
(banks hold bonds for many reasons, especially for treasury management)

9 Two comparable mutual funds, A and B, see the first having a much higher Sharpe ratio. This means that fund A provides…
(a) a higher return for each unit of risk than fund B
(all those ratios compare the extra return to a measure of risk, here the st.dev.)

10 Which of the following risks affects participants to pension funds?
(d) All of the above
(a participant to a pension fund is exposed to all demographic - annuity conversion, finanancial - returns, and inflation - purchase power of annuity, risks)

B) OPEN QUESTION (10 points, do not exceed the space below)
Things worth mentioning
- that they represent purchases or sellings of securities, mostly government bonds but also others (ABS, corporates, …)
- that they can be temporary or outright, conventional or unconventional depending on their features (maturity, eligible instruments, quantities, …)
- that the effect on interests is due to the change in the supply of reserves: other things being equal, more supply means lowering prices (here, interests), and viceversa
- that the effect can be null if current market rates are already too high or too low (equal to discount lending or interests on reserves)

C) EXERCISE (10 points, include a short commentary explaining your calculations)
Three things were needed:
1) calculate the ZC duration: 9/12 months, or 0,75 (between 1/1 and 1/10 there are 9 months. NOT 10!)
2) calculate the PTF duration: (0,75*100*99+5*200*98)/(100*99+200*98)=3,57
3) calculate the price change: -3,57x0,25%/(1+3,75%)=0,86%