EXAM, ... 2005 Student's name ....

1) Value of a portfolio has increased by 6 per cent during last quarter. The annualized return is equal to:
   a) 6%.
   b) 16%.
   c) 24%.
   d) 26%.
2) Continuously compounded return is equal to 10 per cent. The effective annualized rate is:
   a) 9,5%.
   b) 10%.
   c) 10,5%.
   d) 11%.
3) The greater assumed volatility of a risk factor will make Value at Risk _____.
   a) greater.
   b) lower.
   c) the same.
   d) difficult to determine.
4) The spot rate for one year is 5 per cent. The forward rate for the second year is 6 per cent. The two-year zero-coupon bond's price with a par value equal to 1 is:
   a) 0,80.
   b) 0,90.
   c) 1,05.
   d) 1,07.
5) Spot rate z_3 = 7 per cent. Spot rate z_2 = 5 per cent. The forward rate for a capital market instrument ${}_3f_2$ is:
   a) 6%.
   b) 9%.
   c) 11%.
   d) 12%.
6) What is the price impact of a 100 basis point decline in yield on a 10-year par bond. The bond price will
   a) rise by 200 basis points.
   b) drop by 200 basis points.
   c) rise by 600 basis points.
   d) drop by 600 basis points.
7) What is the price impact of a 100 basis points increase in yield on a bond with a modified duration 5 and convexity of 40.
   a) +0,48%.
   b) -0,48%.
   c) + 4,8%.
   d) - 4,8%.
8) A bank has 600 PLN in assets with duration of 3. Duration of all liabilities and equity is 0. What is the impact on equity value if all interest rates fall 200 basis points ?
   a) + 6 PLN.
   b) - 6 PLN.
   c) + 36 PLN.
   d) - 36 PLN.
9) A loan value increased from 1000 to 1100 as interest rate dropped by 400 basis points. Duration is approximately equal to:
   a) 2,5.
   b) –2,5.
   c) 5.
   d) –5.
10) Foreign exchange rate forecast based on uncovered interest rate parity does NOT use
   a) foreign exchange rate volatility.
   b) spot interest rates.
   c) maturity.
   d) spot exchange rate.

11) Currency return volatility is 4%. The expected value of a currency portfolio is 500 PLN. Value at Risk is:
   a) 2 PLN.
   b) 4 PLN.
   c) 20 PLN.
   d) 33 PLN.
12) The Euro appreciation rate was 20%. In the same time forward premium was 5%. Foreign currency risk premium is:
   a) 4%.
   b) 15%.
   c) 25%.
   d) 30%.
13) The EBIT / total assets relation increased from 0,1 to 0,2. Altman's Z-score
   a) increased by 0,45.
   b) increased by 0,33.
   c) decreased by 0,45.
   d) decreased by o 0,33.
14) Forward rate $_2f_1$ for Treasury bond is 6%, for a corporate security is 10%. Probability of repayment in the second year is:
   a) 85,6%.
   b) 88,8%.
   c) 91,9%.
   d) 96,4%.
15) Market value of assets is 1000, long term debt is 100, equity is 300, volatility of ROA is 10%. Distance to default is equal to:
   a) 2,5.
   b) 3,5.
   c) 4,5.
   d) 5,5.
16) Maturity of debt T= 0,5 years. Probability of repayment is 0,9436. Credit spread calculated using Merton's model is equal to:
   a) 0,06%.
   b) 0,77%.
   c) 3,98%.
   d) 11,60%.
17) A rise in probability of default results in
   a) increased credit exposure.
   b) decreased credit exposure.
   c) decreased credit spread.
   d) increased recovery rate.
18) A 1-year spot rate is 5%, a 2-year spot rate is 6%. The one-year forward rate, one year from now is:
   a) 5%.
   b) 6%.
   c) 7%.
   d) 8%.
19) In CREDITRISK+ economic capital should cover
   a) expected losses.
   b) unexpected losses.
   c) expected and unexpected losses.
   d) losses caused by operational risk.
20) Credit spreads
   a) increase during expansion and decrease during recession.
   b) increase during recession and decrease during expansion.
   c) are relatively stable in time.
   d) do not depend on macroeconomic situation.