☰ QuantNet　　　　　　　　　　　　　　Z　✉　🔔　⚡　🔍

Quiz ›

Review answers

Start date:	4 minutes ago
Complete date:	A moment ago
Question 1:	Which of the following concerning the Monte \(arlo method is true?

☐ Pricing American options using FDM is easier than with MC.
☑ The FDM schemes used to discretise SDEs can give biased results.
☐ It is not possible to price barrier options using the MC method.
☑ The Monte Carlo (MC) is less efficient than FDM.
☑ Computing option sensitivities with MC is feasible (but not efficient).

Question 2:	Which of the following concerning FDM is true?

☐ There are no constraints on the step sizes in space and time with explicit FDM.
☑ They replace partial derivatives by divided difference approximations.
☐ Explicit FDM require the solution of a matrix system at each time level.
☑ Divided differences can have first-order or second-order accuracy.
☑ There are no constraints on the step sizes in space and time with implicit FDM.

Question 3:	Which of the following statements concerning the Black Scholes formula is true?

☑ Put-call parity relates put and call option prices.
☐ There is a closed solution for options with early exercise.
☐ The Black Scholes formula is valid for non-constant volatility.
☑ There are exact solutions for option sensitivities for the Black Scholes model.
☑ There is a closed solution for plain options.
☑ The Black Scholes use the Gaussian cumulative distribution function (cdf).
☐ The Black Scholes use the Gaussian probability density (pdf) function.

☑ Perpetual American options have a closed solution.

Question 4:	Which of the following concerning the Explicit Euler method is true?
	☑ The Crank Nicolson method is unconditionally stable and second-order accurate. ☑ EE is first order accurate in the time direction. ☐ The Explicit Euler (EE) method is unconditionally stable. ☑ Oscillations occur with EE if the mesh time step is not of the same order as the square of the mesh size in space.
Question 5:	Which of the following concerning the Binomial Method \(arlo method is true?
	☑ The Binomial Method (BM) can be used to price American options. ☐ BM cannot be used for two-factor models. ☑ BM is less flexible than FDM. ☑ BM can give 'zigzag' and oscillatory solutions.
Score:	5 (100.00%)
Pass/Fail:	Passed

Quiz >