Ethereum and EVM Basics

Which is the right order for Denominations?

A. Wei, Finney, Szabo, Ether, Tether
B. Finney, Szabo, Mether, Gwei
C. Gwei, Szabo, Finney, Ether

Why: https://etherconverter.online/

What is the nonce-field in a transaction?

A. To protect against replay attacks
B. To have an additional checksum for transactions
C. To sum up all ethers sent from that address

Select which statement is true about the EVM

A. While the EVM is Sandboxed, it isn't as powerful as the Bitcoin Network, because it's not Turing Complete
B. The EVM can't access hardware layers or anything outside a blockchain node because it's sandboxed
C. The EVM is extremely powerful, turing complete and perfect for doing computational intensive things, because of the direct access to the graphics card.

DApps are…

A. Great, because they cut the middle man, run on a trusted platform, apply logic to the blockchain where already economic assets are running and thus allow peer to peer trade.
B. An amazing way to create new applications. Those applications run entirely separated from other applications on the platform and allow for logical interactions. To add an additional layer of trust they can't access any funds.
C. Are a new way of applying logical operations for banks and big financial institutions. This way they can reduce the staff while operating at increased security.

To get most out of the blockchain it is best…

A. To use it for the whole business logic. It's always best to have everything in once place.
B. To use it only for those things which need the benefits of the blockchain

What means that a Hashing Algorithm is deterministic?

A. Given the same input it always produces the same output
B. Given a long input it uses equally distributed data to produce the output
C. Given the output it shouldn't be possible to re-generate the input

What's the correct scientific notation?

A. 1 Ether = 10^18 wei, 10^9 Gwei, 10^3 Finney
B. 1 Ether = 10^19 wei, 10^13 Gwei, 10^3 Finney
C. 1 Ether = 10^16 wei, 10^13 Gwei, 10^3 Finney
D. 1 Ether = 10^18 wei, 10^6 Gwei, 10^6 Finney

What Are Private Keys for?

A. To Protect the Public Keys by being cryptographically significant
B. To Sign Transactions And To Derive an Address From
C. To Generate An Address which can sign transactions

Public Keys vs. Private Keys, select which is true:

A. The Public Key is for Signing Transactions, the Private Key must be given out to verify the signature
B. The Private Key signs transactions, the public key can verify the signature
C. The Private Key is to generate a public key. The public key can sign transactions the address is here to verify the transactions

Proof of Work (PoW) vs. Proof of Stake.

A. PoW is computationally intensive which requires lots of energy. On the other hand miners earn straightforward a reward for mining a block and incorporating transactions.
B. PoW is better than PoS, because with PoS we increase the amount of energy spent on the network.
C. PoS is mining with specialized new hardware that has to be purchased with a stack of Ether in the network. Hence the Name: Proof of Stake, which derives from Stack.

Externally Owned Accounts

A. Can be destroyed using the selfdestruct keyword. This way all remaining ether will be sent to the receiver address, regardless if they have a fallback function or not.
B. Are bound to a private key which is necessary to sign transactions outgoing from that account
C. Are logical opcodes running on the ethereum blockchain very similar to smart contracts.