

1.

Which of the following best describes an *identifier*?

1 / 1 point

☐

An identifier is inalienable; no one can steal it, and it can't be separated from you

☐

An identifier represents the whole of us; it is not simply endowed *at* birth, it is endowed *by* birth.

☒

An identifier is what a centralized system uses to grant us access to their services

☐

All of the above

✔

Correct

A username and password is one common example.
2.

What is/are the problem(s) with using a birth certificate as an overarching record of existence?

1 / 1 point

☐

A birth certificate must be created and verified by a licensed hospital or midwife, yet one quarter of all births go unrecorded worldwide.

☐

Children without a birth certificate can have trouble getting an education or health care.

☐

Adults without a birth certificate may not be able to inherit property, vote in elections, claim refugee status, obtain a passport, bank account, or even work.

☒

All of the above

✔

Correct

All of the above statements illustrate the problems with using a birth certificate as an overarching record of existence.
3.

India developed a digital ID for every resident called the *Aadhaar*. What was problematic about its implementation?

1 / 1 point

☐

The number of residents who received an Aadhaar was very low.

☐

The Aadhaar had a negative impact on India's economy.

☒

All of the Aadhaar's demographic and biometric data was stored in a centralized database, which was hacked.

☐

The Aadhaar was not aligned with the UN's Sustainable Development Goals for identity.

✔

Correct

This hack exposed ~1 billion records.
4.

What is/are the problem(s) with storing identifiers in a centralized system?

1 / 1 point

☐

A system administrator can freeze access, change the terms of use, or delete our identifiers altogether.

☐

Porting our data from one system to another can be complicated and expensive.

☐

If a privacy violation occurs (e.g. a hack, identity theft) the responsibility falls on us to deal with the consequences

☒

All of the above

✔

Correct

All of the above represent problems with storing identifiers in a centralized system.
5.

Which of the following should **not** apply to the design of an “identity commons?”

1 / 1 point

☒

It must create an inseparable link between data rights and the actual data.

☐

It must be free of control from any corporation, government, or other third party.

☐

It must outlive its users.

☐

It must enforce the right to be forgotten.

✔

Correct

An identity commons *should* separate data rights from the actual data.
6.

What does it mean for an identity system to be “self-sovereign?”

1 / 1 point

☐

That your personal information is distributed across a peer-to-peer network

☒

That the data you create, and all related rights of privacy, are under your individual control

☐

That your personal information can be ported from one centralized system to another

☐

That your personal data cannot be monetized

✔

Correct

This is what it means for an identity system to be "self-sovereign."
7.

Which of the following describes a protocol for verifying that *x* is true, without knowing what *x* is or who it involves?

1 / 1 point

☐

Open ID

☐

public key infrastructure

☐

privacy by design

☒

zero-knowledge proof

✔

Correct

A zero-knowledge proof is a protocol for verifying that *x* is true, without knowing what *x* is or who it involves.
8.

What is/are the function(s) of a *proxy contract* in a blockchain-based identity system?

1 / 1 point

☐

A proxy contract enables users to sign and verify an action, transaction, or claim.

☐

A proxy contract can interact with other smart contracts on a blockchain.

☐

A proxy contract can grant others temporary permission to read or write one of our data files.

☒

All of the above

✔

Correct

All of the above are functions of a proxy contract.
9.

What is/are the function(s) of a *controller contract* in a blockchain-based identity system?

1 / 1 point

☒

A controller contract contains logic for identity recovery, separating one's cryptographic keys from their proxy contract.

☐

A controller contract enables two or more parties to work together on a computation while keeping each users' inputs private.

☐

A controller contract is a private information retrieval scheme used in highly regulated industries, such as health care.

☐

All of the above

✔

Correct

This is the primary function of a controller contract.
10.

Which of the following is a proposed standard for blockchain-based identity on the Ethereum network, issued by Fabian Vogelsteller?

1 / 1 point

☐

DID

☐

ERC 20

☒

ERC 725

☐

ID 2020

✔

Correct

ERC 725 stands for "Ethereum request for comment, issue 725."