## QUIZ:

- 1. To access the Grid resources you need:
  - a. A single account protected with username and password
  - b. A Grid certificate, a VO membership and access to a user interface machine
  - c. Root access to the various Grid sites
  - d. A certificate stored in PKCS12-format in your \$HOME/.globus directory

Correct Answer is b.

- 2. The delegation of user credentials:
  - a. Is enabled when the Certification Authority (CA) self-signs its own certificate with the CA own private key
  - b. Creates a proxy certificate with infinite lifetime
  - c. Is achieved with limited lifetime proxy certificates
  - d. Is enabled when the Certification Authority (CA) signs the user proxy certificate

Correct Answer is c.

- 3. On the User Interface machine you must have a \$HOME/.globus subdirectory, where:
  - a. You install a userrequest.pem file needed for submitting grid jobs
  - You store the PKCS12 certificate passphrase in order to request a Virtual Organizations (VO) membership
  - c. You find all the Virtual Organizations for different kinds of research communities
  - d. You store your public key in the usercert.pem file and your private key in the userkey.pem file

Correct Answer is d.

- 4. Jobs that last longer than the proxy default 12 hours:
  - a. Will fail because the job proxy has expired before the job has finished
  - b. Will succeed only if they use the Myproxy proxy renewal mechanism
  - c. Will stall until the user creates a new proxy and then resume
  - d. Will be migrated to run on Myproxy server

Correct Answer is b.

- 5. The Grid Certificates are signed and issued by the:
  - a. Certification Authority (CA)
  - b. National Grid Initiative (NGI) helpdesk
  - c. Virtual Organization (VO)
  - d. Registration Authority (RA)

Correct Answer is a.

- 6. The access control to compute and storage resources on Grid is based on the:
  - a. Secure Socket Layer (SSL) handshake
  - b. Distinguished Name (DN) of the user
  - c. Symmetric cryptography common key
  - d. Virtual Organization (VO) policy

Correct Answer is d.

- 7. Every user or service on the Grid is identified via a certificate. Which of the following information is *not* contained in the Grid certificate?
  - a. The user private key
  - b. The issuer's Distinguished Name and Digital Signature
  - c. The user Distinguished Name and public key
  - d. The validity period of the certificate

Correct Answer is a.

- 8. Once you have the Grid certificate in your possession, you have to:
  - a. Install it only on the User Interface machine
  - b. Install it only on your browser
  - c. Install it on the User Interface machine and your browser
  - d. Set the public key permissions to read-only

Correct Answer is c.

- 9. Authentication is the process of:
  - a. Gaining access to requested resources
  - b. Verifying your identify using an agreed upon credential
  - c. Submitting jobs to a WMS
- d. Registering yourself for a virtual organization Correct Answer is b.
  - 10. A User Interface machine
    - a. Processes work from the CE
    - b. Allows you to interact with grid services
    - c. Stores the work that cannot directly be executed on a WN
    - d. Provides you with a graphical user interface

Correct Answer is b.

## Optional:

The Grid security authentication method relies on:

- a. Proxy certificates and delegation of the private key
- b. X.509 certificate formats, signed from a trusted Registration Authority (RA)
- c. Symmetric cryptography and common secret key between user and resources.
- d. Asymmetric cryptography and the Secure Sockets Layer (SSL) communication protocol

Correct Answer is d.

In Asymmetric key cryptography:

- a. The user creates a symmetric key pair and publishes only the private  $\ensuremath{\mathsf{key}}$
- b. Public key is the decryption key
- c. Private key is the encryption key
- d. An encrypted message can only be decrypted with the corresponding private key

Correct Answer is d.