### 4. HTTP can be described as a ....

- a) language for displaying web pages
- b) a one-way request protocol
- c) a request-response protocol
- d) a one-way response protocol

### 5. An HTTP Request can contain:

- a) a "headers" list of key-value pairs, plus a "body" of text of arbitrary size
- b) response codes
- c) HTML code
- d) Binary data

### 6. The command "rails server" will...

- a) start a local web server on port 3000
- b) deploy a web server to the internet
- c) create a new rails application
- d) migrate the database

### 7. A Rails "route"...

- a) connects controllers and views together
- b) can specify querystring parameters
- c) connects a url path to a Ruby method in your app
- d) creates a controller instance

### 8. A Rails controller ....

- a) can contain only one action method
- b) derives from ActiveRecord::Base
- c) is responsible for handling HTTP requests
- d) maintains variable state across requests

### 9. A Rails "action"...

- a) is a Ruby method that is responsible for generating an HTTP response
- b) can reside inside in any class in your app
- c) must have a corresponding view template
- d) must follow a specific naming convention

### 10. A Rails "action"...

- a) can access querystring parameters with the qrystring[] hash
- b) can retrieve dynamic route segment values
- c) is expected to modify the params[] hash

# 11. Which render syntax is NOT correct?

- a) render "Greetings"
- b) render 'greetings'
- c) render:text => "Greetings"
- d) render

### 12. A view template....

- a) can access local variables defined in the corresponding action method
- b) can access instance variables defined in the corresponding action method
- c) can access instance variables defined in any method of the same controller
- d) must be named differently from its corresponding action

## 13. Rails "assets" are....

- a) stylesheets, javascript files, and images
- b) Ruby code that will never change
- c) CSS and images that are hosted by a CDN
- d) static HTML files

# 14. Models...

- a) represent real-world things inside our software
- b) can access the params [] hash
- c) cannot be instantiated from controllers
- d) can render views

### 15. Models...

- e) can contain action methods if the route specifies the model class using the :controller => option in a route
- f) are often database-backed
- g) are responsible for generating HTML code

# 16. Which Rails feature intentionally embrace the DRY principle?

- a) layouts
- b) routes
- c) controllers
- d) embedded ruby syntax

## 17. The one primary responsibility of a view is to...

- a) DRY up your code
- b) generate JSON
- e) apply markup to controller-provided data
- d) retrieve data from the database

### 18. A Rails migration is best defined as...

- a) the schema of the entire database
- b) the schema for one table
- c) SQL instructions for at least one database schema change
- d) a Ruby script that generates DDL instructions for at least one database schema change

### 19. Routes defined in routes.rb ....

- a) are evaluated using a best-match algorithm upon receiving an http request
- b) are evaluated top-down for the first possible match upon receiving an http request

# 20. The best way to determine the actual set of routes defined in a Rails application is...

- a) rake routes
- b) view the routes.rb file
- c) watching the server log
- d) rake db:migrate
- e) rake about

### 21. Controller instances....

- a) are held in memory for the life of the application
- b) are held in memory until the action method returns
- c) are held in memory until an HTTP response has been generated
- d) are created by the routes file
- e) are created by code you must write yourself

## 22. rails console....

- a) is similar, but different from, irb
- b) is exactly the same as irb
- c) shows the server log
- d) is a simulator for making http requests

## 23. In the following standalone Ruby script:

require 'json'
require 'open-uri'
url = "http://mydomain.com/hello.json"
x = JSON.parse(open(url).read)

## What can we say with 100% certainty?

- a) x is an instance of class Array
- b) x is an instance of class Hash
- c) x is an instance of class String
- d) it is not possible to infer the type of x from this code example
- e) neither of the **require** statements are necessary

# 24. In order to work properly, a form requires a minimum of...

- a) two routes and two actions
- b) one layout
- c) two controllers
- d) one route and one action

# 25. In Rails, the application layout file...

- a) must be rendered explicitly
- b) provides HTML markup that needs to be included in every page
- e) provides Ruby code that needs to invoked for every action
- d) is autogenerated by Rails and should not be modified by the developer