21.1.2021, **Total time: 30 minutes**

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Try to answer briefly, concisely and to the point.   
**It is forbidden to use study materials, Google and other not only Internet resources!**

1. **(10 points)**  
   Describe and explain principle of HTTP functionality. Explain the purpose and write a particular example of HTTP message content. Compare HTTP 1.0 and HTTP 1.1.  
   - HTTP (Hyper Text Transfer Protocol) used in www. HTTP is a protocol that allows fetching resources, such as HTML doc.  
   - Purpose: Provide a way for web browsers and server communicate
2. **(10 points)**  
   Describe the purpose and utilization of the CSS technology. Specify basic syntax and some examples. What are the benefits of LESS approach?

* CSS (Cascading Style Sheet language) is a language to create style for the website and is used to style and style elements written in markup language, such as HTML.
* Example:

H1{

Margin: 10px;

Line-heigh: 2px;

Font-size: 20px;}

* Benefits of LESS are: Simple, more concise, more effective

1. **(10 points)**  
   What is XPath and what is the purpose of it? What are the constructional parts (3) of XPath query and how are they use? Write example of XPath queries.

* XPATH is a design language for build the query and the purpose of making applications with XML documents and access values and attributes of elements.
* Example:

<game category = “strategy”>

<title> CS-GO </title>

<point> 85 User Score </point>

</game>

1. **(10 points)**  
   Simply specify (target of attack, principle of attacking, defend) following types of attack among internet applications: **DoS attack**  
   - An attack uses a technical overload of a server to close a certain service / website.

* **Target: Web server, e-shop or e-banking,…**
* Principle:
* Defend: Upgrade the system, limit the number of connection, use firewalls for filtering the content information.

1. **(20 points – 10x2 point)**  
   Specify technology domain and purpose (meaning) of technology/approach/application … of given abbreviations/name (answer simply, directly into the list).

POST: An attribute of HTTP - is used to send data to a server to create/update a resource.  
Wireframe: **website wireframe -Representation of the interface in different depths of detail**  
DOM: Document Object Model  
jQuery: JavaScirpt Library - makes building Javascript functions easier, faster

LESS: Leaner Style Sheet - support to write CSS code that represents the website interface format in the following direction:  
JSON: JavaScript Object Notation  
DTD: Dissociative identity disorder  
ASIDE: a tag of HTML - defines some content aside from the content it is placed in  
API: Application Programming Interface  
XSS: Cross Site Scripting