SYLLABUS
for Comprehensive State Exam
Degree: Computer science
Professional qualification: Master degree in
“Informatics and Computer Science”, Class: 2023 – 2024

E-Commerce
4. Introduction to e-marketing. The e-commerce website as a marketing tool. Website promotion and advertising. Web site Search Engine Optimization (SEO).

Literature:

.NET Web Development
5. The .NET platform – .NET Framework, .NET and .NET Core web applications, basic components of the .NET Framework, programming languages and development tools.
6. Web controls, events and interactions.
7. State management – application state, session state, server controls state.
8. .NET web applications security, authentication and authorization.
9. Working with databases – basic concepts and supported technologies, controls and functions for database access.

Literature:
Online lectures (http://users.ue-varna.bg/vsulov and http://e-learn.ue-varna.bg).

E-Finance
10. Electronic banking. The essence of electronic banking. Types of electronic banking and chronology in its offering
11. Internet banking. Technology and organization of Internet banking. Types of systems for Internet banking. Advantages of Internet banking


Literature:

Server-Side Web Programming
17. Applications with web interface. PHP. Working with templates in PHP.
18. Web applications working with DBMS. Administration tasks.
19. AJAX technology. Web application security.

Literature:

Data Science
23. Team Data Science Lifecycle Process.
24. Data visualization tools

Literature:

Type of exam: e-test – 80 multiple choice questions covering all disciplines. Each question has one right answer. Each correctly answered question brings 1 or more points, because
questions have different weights. Questions answered with a wrong answer do not decrease the total amount of points. The test is done within 3 hours.

18.03.2024  Head of the Department of Informatics:

(Prof. Julian Vasilev, PhD)