1.What challenge is faced when integrating AI into an established CI toolchain?   1 point

○ Achieving seamless integration

◉ Data privacy and security

○ Difficulty in transitioning from traditional CI to AI-driven CI

○ None of the above

2.Which company utilizes machine learning for autonomous adjustments in various services?   1 point

○ Gmail

○ IBM

○ Balbix Security Cloud

◉ Juniper Networks

3.Which tool utilizes GPT to analyze HTTP requests and responses for detecting vulnerabilities?   1 point

○ Sophos Intercept X

○ Symantec Endpoint Security

○ Splunk User Behavior Analytics

◉ BurpGPT

4.What is one major challenge associated with using generative AI in software development?   1 point

◉ The potential for bias and inaccuracy in generated outputs.

○ The lack of creativity and exploration opportunities.

○ The absence of ethical implications.

○ The guarantee of privacy and security.

5.Which of these are examples of successful AI-driven apps?   1 point

○ TikTok and Instagram

◉ Siri and Alexa

○ Netflix and Hulu

○ Facebook and Twitter

6.What is one concern associated with generative AI models in software development?   1 point

◉ The potential for spreading false information

○ The need for extensive training data

○ The requirement to obtain informed consent from users

○ The ability to create synthetic vocal recordings

7.Which of the following is a technique AI-powered code review tools used to analyze source code   1 point
without executing it and identify potential issues such as coding style violations, unused variables, or
memory leaks?

○ Automated log analysis

○ Predictive debugging

◉ Static analysis

○ Bug detection

8.What is one of the key capabilities of Large Language Models (LLMs) in software development? `1 point`

○ Image recognition

◉ Code generation and auto-completion

○ Hardware optimization

○ Social media analysis

9.Which of the following AI-driven approaches involves applying AI techniques for code refactoring? `1 point`

◉ Code automation

○ Code analysis

○ Anomaly detection

○ Design pattern analysis

10.What feature of AI web builders helps in swiftly creating professional logos. `1 point`

○ AI website generator

○ A text generator

◉ AI logo maker

○ Additional SEO measures

11.How does AI contribute to email security, particularly in filtering spam? `1 point`

○ Manually reviewing each email

◉ Machine learning and AI algorithms

○ Avoiding the use of spam filters

○ ignoring potentially harmful content

12.How can ethical concerns related to NLP technology be addressed? `1 point`

○ By ignoring privacy concerns

◉ By ensuring diversity in training data

○ By introducing bias intentionally

○ By avoiding transparency in algorithms

13.Which of the following statements about the use of AI in software testing is true? `1 point`

○ AI algorithms only improve test data generation.

○ AI techniques are limited to automating test case generation.

○ AI analysis cannot help prioritize test cases based on software quality.

◉ AI-based techniques enable intelligent test generation and execution of test cases along with other capabilities.

14. Which of the following is a technique used by AI-powered code review tools?   1 point

○ Automated log analysis

○ Social media analysis

○ Code pattern analysis

◉ Static analysis

15. Which of the following is a role played by AI in CI/CD?   1 point

◉ Automated Testing and Quality Assurance

○ Predictive debugging

○ Bias detection

○ Manual Code Review

16. What are some challenges associated with using generative AI in software development?   1 point

○ Limited creativity and exploration options

◉ Potential for bias and inaccuracy in generated outputs

○ Lack of intellectual property protection

○ Low computational power required for training generative AI models

17. Which of the following is mentioned as an ethical consideration for using generative AI in software development?   1 point

◉ Bias and Discrimination

○ Code automation

○ Test case generation

○ Speed and efficiency

18. Which of the following is an example of a generative AI model that excels in language translation tasks?   1 point

○ Variational autoencoders (VAEs)

○ Generative adversarial networks (GANs)

◉ Transformers

○ Reinforcement learning algorithms

19. What is one of the challenges associated with the ethical usage of Large Language Models in software development   1 point

○ Code optimization

◉ Bias detection

○ Speed of code generation

○ Hardware limitations

20. How does AI assists in implementing design patterns in software systems?   1 point

◉ Analyzing code for architectural patterns

○ Automating client chat services

○ Generating high-level architecture

○ Analyzing code for design patterns