Randomized Grid Search and Decision Trees Test Paper -20 Questions (20 mins)



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Randomized Grid Search Section

Question 1   
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Q1. What is Randomized Grid Search, and why is it used? """

Answer:

Question 2   
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Q2. How does Randomized Grid Search differ from Grid Search? """

Answer:

Question 3   
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Q3. What is the purpose of the n\_iter parameter in Randomized Grid Search? """

Answer:

Question 4   
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Q4. What are the advantages of using Randomized Grid Search over Grid Search?

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Answer:   
Question 5   
"""

Q5. When might Randomized Grid Search be preferable to Grid Search? """

Answer:



Decision Trees Section   
Question 6   
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Q6. What is a Decision Tree in machine learning? """

Answer:   
Question 7   
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Q7. Describe the structure of a Decision Tree. """

Answer:   
Question 8   
"""

Q8. What is Gini impurity, and how is it used in Decision Trees?

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Answer:   
Question 9   
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Q9. How does entropy help Decision Trees make splits? """

Answer:   
Question 10   
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Q10. What is a leaf node in a Decision Tree? """

Answer:   
Question 11   
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Q11. What does the max\_depth parameter do in a Decision Tree? """

Answer:   
Question 12   
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Q12. Define information gain and explain its role in Decision Trees. """

Answer:   
Question 13

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Q13. What are some common ways to avoid overfitting in Decision Trees? """

Answer:

Question 14

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Q14. What is pruning in the context of Decision Trees? """

Answer:

Question 15

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Q15. How does a Decision Tree handle continuous and categorical features differently?

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Answer:

Question 16

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Q16. Describe the role of the min\_samples\_split parameter in a Decision Tree. """

Answer:

Question 17

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Q17. What are some advantages and disadvantages of using Decision Trees?

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Answer:   
Question 18   
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Q18. Why are Decision Trees considered "greedy" algorithms? """

Answer:   
Question 19   
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Q19. Explain the difference between classification and regression Decision Trees.

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Answer:   
Question 20   
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Q20. What is the impact of the min\_samples\_leaf parameter in a Decision Tree? """

Answer: