

○ 0.9

☐ 0.85

That's incorrect! Revisit the videos for this week.

Question 2

1 / 1 pts

What is the primary goal of predictive analytics?

- ☐ To analyse past data
- ☒ To identify future trends and outcomes
- ☐ To describe current conditions
- ☐ To generate random data

Correct!

That's correct!

Question 3

0 / 1 pts

If the regression equation is $Y=60-2.5X$, what is the expected test score for 18 interruptions?

- ☐ 10
- ☒ 15
- ☐ 20
- ☐ 12

You Answered

Correct Answer

That's incorrect! Revisit the videos for this week.

Question 4

1 / 1 pts

What does a negative Spearman correlation coefficient indicate?

- ☐ No relationship between variables
- ☒ Variables are negatively correlated
- ☐ Variables are uncorrelated
- ☐ Variables are positively correlated

Correct!

That's correct!

Question 5

1 / 1 pts

In simple regression, which variable is predicted?

- ☐ Control variable

Correct!

- ☐ Random variable
- ☒ Dependent variable
- ☐ Independent variable

That's correct!

Question 6

1 / 1 pts

Using the Spearman formula, if $r = 10$ and $n=5$ what is ρ ?

Correct!

- ☒ 0.50
- ☐ 0.60
- ☐ 0.90
- ☐ 0.77

That's correct!

Question 7

1 / 1 pts

The intercept 'a' in the regression equation represents:

Correct!

- ☐ The average value of Y
- ☒ The starting value of Y when X is zero
- ☐ The average value of X
- ☐ Change in Y for one unit change in X

That's correct!

Question 8

1 / 1 pts

In a dataset where the Spearman correlation coefficient is calculated as 0.49, what does this value indicate?

Correct!

- ☐ No relationship
- ☐ Strong negative relationship
- ☐ Perfect positive relationship
- ☒ Moderate positive relationship

That's correct!

Question 9

1 / 1 pts

In a negative correlation, what happens to one variable when the other

In a negative correlation, what happens to one variable when the other variable increases?

- ☐ Both variables increase
- ☒ One variable decreases
- ☐ The relationship is unpredictable
- ☐ One variable remains constant

Correct!

That's correct!

Question 10

1 / 1 pts

Which value indicates a perfect positive correlation?

- ☐ -1
- ☐ 0
- ☐ 0.5
- ☒ +1

Correct!

That's correct!

Question 11

1 / 1 pts

Which technique is a simple form of predictive analytics?

- ☒ Linear regression
- ☐ Artificial neural networks
- ☐ Deep learning
- ☐ Data mining

Correct!

That's correct!

Question 12

1 / 1 pts

What type of correlation does Spearman Correlation measure?

- ☐ Non-monotonic relationship
- ☐ Linear relationship
- ☒ Monotonic relationship
- ☐ Causal relationship

Correct!

That's correct!

Question 13

1 / 1 pts

What is required for simple regression analysis?

- ☐ Ordinal data
- ☐ Categorical data
- ☒ Numeric data
- ☐ Non-linear data

Correct!

That's correct!

Question 14

1 / 1 pts

What is the purpose of regression analysis?

- ☒ To predict the value of one variable based on another
- ☐ To classify data
- ☐ To test independence between variables
- ☐ To find patterns in categorical data

Correct!

That's correct!

Question 15

1 / 1 pts

A company wants to forecast future sales based on historical sales data. They use a linear regression model with sales as the dependent variable and marketing spend as the independent variable. If the model equation is $\text{Sales} = 50 + 2 \times \text{Marketing Spend}$, what will be the forecasted sales if the marketing spend is \$1000?

- ☐ \$1500
- ☐ \$1000
- ☒ \$2050
- ☐ \$205

Correct!

That's correct!

Question 16

1 / 1 pts

Which pattern is characterized by one variable increasing while the other decreases?

- ☐ Perfect correlation
- ☐ Positive correlation
- ☒ Negative correlation

Correct!

☐ No correlation

That's correct!

Question 17

1 / 1 pts

What is the primary purpose of simple regression?

- ☐ To test independence of categorical variables
- ☒ To determine the relationship between one dependent and one independent variable
- ☐ To find the relationship between multiple variables
- ☐ To predict categorical outcomes

Correct!

That's correct!

Question 18

1 / 1 pts

What does Karl Pearson Correlation measure?

- ☐ The causality between two variables
- ☐ The degree of non-linear relationship between two variables
- ☒ The strength and direction of a linear relationship between two variables
- ☐ The mean of two variables

Correct!

That's correct!

Question 19

1 / 1 pts

What does a Spearman correlation coefficient of +1 indicate?

- ☒ Perfect positive monotonic relationship
- ☐ Perfect negative monotonic relationship
- ☐ Moderate negative relationship
- ☐ No relationship

Correct!

That's correct!

Question 20

0 / 1 pts

When is Spearman Correlation typically used?

When is Spearman Correlation typically used:

- ☐ When data is normally distributed
- ☐ When dealing with ordinal data or ranks
- ☒ When data is not measured on a ratio scale
- ☐ When assessing the strength of a linear relationship

Correct Answer

You Answered

That's incorrect! Revisit the videos for this week.

Quiz Score: **17** out of 20

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