

## ICS Part 2 Statistics Chapter 13 Online Test

Sr	Questions	Answers Choice
1	If the null hypothesis is false, we many accept it leading to a ----- decision	A. true B. correct C. wrong D. none of these
2	The hypothesis which is tested for possible rejection is called	A. common hypothesis B. null hypothesis C. alternative hypothesis D. wrong hypothesis
3	Which error is occurred when the defendant were found guilty if, infect the defendant is innocent	A. type-I B. type-II C. no error D. both a and b
4	If $H_0: \mu \geq \mu_0$ and $H_1: \mu < \mu_0$ and level of significance is $\alpha$ then $H_0$ will be rejected if	A. $Z \leq \alpha$ B. $Z \leq \alpha/2$ C. $Z \geq 1-\alpha$ D. $Z \geq 1-\alpha/2$
5	The values of test statistic which separate the rejection and non rejection regions for the test are called	A. simple values B. critical values C. parametric values D. none of these
6	Given $\mu_0 = 170$ , $\bar{X} = 190$ , $\sigma = 36$ and $n = 9$ ; which statistic is appropriate?	A. t B. z C. $\chi^2$ D. F
7	An automobile is driven on the average on more than 1600 kilometers per year, the null hypothesis is	A. $H_0: \mu \leq 1600$ kilometers B. $H_0: \mu \geq 1600$ kilometers C. $H_0: \mu < 1600$ kilometers D. $H_0: \mu > 1600$ kilometers
8	A statement about the value of a population parameter is called:	A. Null hypothesis B. Alternative hypothesis C. Simple hypothesis D. Composite hypothesis
9	The degree of confidence is equal to:	A. $\beta$ B. $1 - \beta$ C. $1 - \alpha$ D. $\alpha$
10	If $H_0: \pi \geq \pi_0$ , $H_1: \pi < \pi_0$ and level of significance is $\alpha$ then $H_0$ will be rejected if	A. $Z \leq \alpha$ B. $Z \geq \alpha/2$ C. $Z \geq 1-\alpha$ D. $Z \leq 1-\alpha$
11	If we reject $H_0$ when $H_0$ is actually true then it is	A. type - I error B. type - II error C. type - III error D. type - IV error
12	A statistical hypothesis is an assertion or conjecture about the distribution of random variables	A. one B. two C. one or more D. three
13	The alternative hypothesis always contains the sign of	A. equality B. inequality C. ratio D. proportion
14	The alternative hypothesis is also called:	A. Null hypothesis B. Statistical hypothesis C. Research hypothesis

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15 Suppose that the null hypothesis is true and it is rejected, is known as:

A.  $\alpha$  type-I error, and its probability is  $\beta$   
B.  $\alpha$  type-I error, and its probability is  $\alpha$   
C.  $\alpha$  type-II error, and its probability is  $\alpha$   
D.  $\alpha$  type-II error, and its probability is  $\beta$

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16 An example in a two-sided, alternative hypothesis is:

A.  $H<sub>1</sub>: u < 0$   
B.  $H<sub>1</sub>: u > 0$   
C.  $H<sub>1</sub>: u < u<sub>0</sub>&gt; 0$   
D.  $H<sub>1</sub>: u \neq 0$

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17  $P(\text{type I error})$  is equal to:

A.  $1 - \alpha$   
B.  $1 - \beta$   
C.  $\alpha$   
D.  $\beta$

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18 A hypothesis that specifies all the value of parameter is called:

A. Statistical hypothesis  
B. Simple hypothesis  
C. Composite hypothesis  
D. None of these

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19  $1 - \alpha$  is the probability associated with:

A. Type-I error  
B. Type-II error  
C. Level of confidence  
D. Level of significance

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20 The power of the test is equal to:

A.  $\alpha$   
B.  $1 - \alpha$   
C.  $\beta$   
D.  $1 - \beta$

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