

## ICS Part 2 Statistics Chapter 13 Online Test

Sr	Questions	Answers Choice
1	The hypothesis which is tested for possible rejection is called	A. common hypothesis B. null hypothesis C. alternative hypothesis D. wrong hypothesis
2	The alternative hypothesis always contains the sign of	A. equality B. inequality C. ratio D. proportion
3	A statistic on the basis of which a decision is made about the hypothesis of interest is called	A. critical region B. test statistic C. parameter D. rejection region
4	A region for which the $H_0$ is rejected is called	A. acceptance region B. rejection region C. critical region D. both b and c
5	If critical region is located equally in both tails of the sampling distribution of test statistic, the test is called ----- test	A. one tailed B. two tailed C. left tailed D. right tailed
6	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
7	The Level of ----- of test is the maximum probability with which we are willing to a risk of type -I error	A. correction B. error C. significance D. statistics
8	A ----- error is made by accepting $H_0$ if $H_1$ is actually true	A. type - I B. type - II C. type - III D. type - IV
9	If the null hypothesis is false, we may accept it leading to a ----- decision	A. true B. correct C. wrong D. none of these
10	A statistical hypothesis is an assertion or conjecture about the distribution of random variables	A. one B. two C. one or more D. three
11	An automobile is driven on the average on more than 1600 kilometers per year, the null hypothesis is	A. $H_0: \mu = 16000$ kilometers B. $H_0: \mu \leq 16000$ kilometers C. $H_0: \mu \leq 16000$ kilometers D. $H_0: \mu \geq 16000$ kilometers
12	Hypothesis that does not completely specify the underlying population distribution is called	A. simple hypothesis B. dual hypothesis C. composite hypothesis D. common hypothesis
13	The hypothesis which we are willing to accept when the null hypothesis is rejected is called	A. simple hypothesis B. composite hypothesis C. null hypothesis D. alternative hypothesis
14	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. non parametric values

		D. none of these
15	Which error is occurred when the defendant were found guilty if, in fact the defendant is innocent	A. type-I B. type-II C. no error D. both a and b
16	If $H_0: \mu \leq \mu_0$ and $H_1: \mu > \mu_0$ and level of significance is $\alpha$ then $H_0$ will be rejected if	A. $Z \leq -Z_{\alpha}$ B. $Z \leq -Z_{\alpha/2}$ C. $Z \leq -Z_{1-\alpha}$ D. $Z \leq -Z_{1-\alpha/2}$
17	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. $Z \leq -Z_{\alpha}$ B. $Z \leq -Z_{\alpha/2}$ C. $Z \leq -Z_{1-\alpha}$ D. $Z \leq -Z_{1-\alpha/2}$
18	A statement about the value of a population parameter is called:	A. Null hypothesis B. Alternative hypothesis C. Simple hypothesis D. Composite hypothesis
19	A quantitative statement about a population is called:	A. Research hypothesis B. Composite hypothesis C. Simple hypothesis D. Statistical hypothesis
20	The alternative hypothesis is also called:	A. Null hypothesis B. Statistical hypothesis C. Research hypothesis D. Simple hypothesis
21	A hypothesis that specifies all the value of parameter is called:	A. Statistical hypothesis B. Simple hypothesis C. Composite hypothesis D. None of these
22	The choice of one-tailed test and two tailed test depends upon:	A. Composite hypothesis B. Null hypothesis C. Alternative hypothesis D. Simple hypothesis
23	$1 - \alpha$ is called:	A. Confidence coefficient B. Power of the test C. Size of the test D. Level of significance
24	$1 - \alpha$ is the probability associated with:	A. Type-I error B. Type-II error C. Level of confidence D. Level of significance
25	Level of significance is also called:	A. Power of the test B. Size of the test C. Level of confidence D. Confidence coefficient
26	P(type I error) is equal to:	A. $1 - \alpha$ B. $1 - \beta$ C. $\alpha$ D. $\beta$
27	P(type II error) is equal to:	A. $\alpha$ B. $\beta$ C. $1 - \alpha$ D. $1 - \beta$
28	Which hypothesis is always in an inequality form?	A. Simple hypothesis B. Alternative hypothesis C. Null hypothesis D. Composite hypothesis
29	The power of the test is equal to:	A. $\alpha$ B. $1 - \alpha$ C. $\beta$ D. $1 - \beta$
30	The degree of confidence is equal to:	A. $\beta$ B. $1 - \beta$ C. $1 - \alpha$ D. $\alpha$
31	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 $\beta$

32 Which of the following is not composite hypothesis?

- A.  $\mu \leq 0$
- B.  $\mu \geq 0$
- C.  $\mu = 0$

33 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

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

- A.  $H_1: \mu < 0$
- B.  $H_1: \mu > 0$
- C.  $H_1: \mu \neq 0$
- D.  $H_1: \mu = 0$