

## ECAT Pre General Science Statistics Online Test

Sr	Questions	Answers Choice
1	First-hand collected data is called	A. primary data B. secondary data C. grouped data D. ungrouped data
2	A _____ is the totality of items or things under consideration	A. Sample B. Population C. Statistic D. Parameter
3	Another name of the population is	A. Experiment B. Survey C. Universe D. Parameter
4	Quantities which don't vary from individual to individual are called	A. Variables B. Surveys C. Constant D. Parameters
5	_____ is a quantity computed from a population when the entire population is available.	A. Variables B. Surveys C. Ratio D. Parameters
6	The arrangement of data in order of magnitude is called	A. Order statistic B. Parameter C. Ratio D. Parameters
7	A value calculated from sample is called	A. Parameter B. Variable C. Constant D. Statistic
8	_____ is the chance variation in an observation.	A. Random error B. Mean C. Deviation D. Discrete Varibale
9	When statistics is applied in Economics, it is called:	A. Psychometry B. Econometrics C. Economistics D. Trigonometrics
10	Level of satisfaction is	A. Continuous B. Discrete C. Population D. Qualitative
11	A sample is a representative part of a	A. Continuous B. Discrete C. Population D. Parameter
12	A discrete variable is also known as	A. Continuous B. Discontinuous C. Random Variable D. Deviation
13	Primary data and ungrouped data are	A. Same B. Opposite C. Not same D. Proportional
14	Statistical laws are true	A. On the average B. In each case C. In long run D. None of these
15	The data which have not undergone any statistical treatment are _____ data	A. Primary B. Secondary C. Grouped D. None of these

16	The process of making tables or arranging data into rows and columns is called	A. Classification B. Tabulation C. Information D. Arrangement
17	The heading for different columns are called	A. Stubs B. Source notes C. Columns captions D. Footnotes
18	The heading for different rows are called	A. Footnotes B. Prefatory note C. Stub D. None of these
19	The entries in different cells of columns and rows in a table are called	A. Body of the table B. Captions C. Stub D. Prefatory notes
20	The part of the table containing row captions is called	A. Stub B. Row captions C. Box-head D. Row-head
21	The part of column captions is called	A. Stub B. Body of the column C. Box-head D. Prefatory
22	Data are classified according to one characteristic, called	A. One-way classification B. Tabulation C. Single classification D. Documentation
23	The number of tally count for each value is its	A. Range B. Frequency C. Class boundaries D. Class mark
24	The difference between the upper and the lower class boundaries of a class is called	A. Class interval B. Class distribution C. Frequency D. Cumulative frequency
25	The number used to describe classes in a frequency distribution are called	A. Class limits B. Relative frequency C. Cumulative frequency D. Width of class
26	Simple bar chart is represented by	A. Circular region B. Polygons C. Rectangles D. None of these
27	Frequency polygon is a	A. Line graph B. Bar graph C. Circular graph D. Rectangle graph
28	Graph of time series is called	A. Sector diagram B. Ogive C. Historigram D. None of these
29	In tabulation, column captions are also called	A. Box-head B. Body C. Stub D. None of these
30	In tabulation, row captions are also called	A. Stub B. Box-head C. Body D. None of these
31	Sample mean is a	A. Constant B. Parameter C. Variable D. Statistic
32	A central value is also called	A. Central tendency B. Variability C. Population D. Parameter
33	The sum of deviations of the value from the mean is always	A. Minimum B. Maximum C. One

		<p>C. One</p> <p>D. zero</p>
34	Mean is highly affected by	<p>A. Even values</p> <p>B. Odd values</p> <p>C. Zero values</p> <p>D. Extreme value</p>
35	The sum of squares of the deviations of the observation from their mean is	<p>A. Minimum</p> <p>B. Maximum</p> <p>C. Zero</p> <p>D. One</p>
36	Geometric mean of 0, 5, 1, 4, 8 is	<p>A. 8</p> <p>B. 5</p> <p>C. 2</p> <p>D. 1</p>
37	G.M becomes zero if any of the observation is	<p>A. zero</p> <p>B. 1</p> <p>C. similar</p> <p>D. Opposite</p>
38	If any value in the data set is zero, then it is not possible to compute	<p>A. H.M</p> <p>B. A.M</p> <p>C. Median</p> <p>D. Mode</p>
39	The most frequent value in a data set is called	<p>A. Mean</p> <p>B. Median</p> <p>C. Mode</p> <p>D. Quartile</p>
40	A.M is _____ affected by extreme values	<p>A. Not</p> <p>B. Highly</p> <p>C. Less</p> <p>D. None of these</p>
41	In symmetrical distribution, mean, median and mode are	<p>A. Equal</p> <p>B. Different</p> <p>C. Zero</p> <p>D. None of these</p>
42	If any value is zero, then it is impossible to calculate	<p>A. H.M</p> <p>B. Median</p> <p>C. A.M</p> <p>D. None of these</p>
43	A symmetrical distribution has mean equal to 4. Its mode will be	<p>A. Less than 4</p> <p>B. Equal to 4</p> <p>C. Greater than 4</p> <p>D. None of these</p>
44	The difference between the highest and lowest values in a population is called	<p>A. Range</p> <p>B. Variance</p> <p>C. Mean deviation</p> <p>D. Standard deviation</p>
45	The mean of the absolute deviations between the values and their median is called	<p>A. Population</p> <p>B. Standard deviation</p> <p>C. Range</p> <p>D. Mean deviation</p>
46	_____ is always greater than or equal to zero	<p>A. Range</p> <p>B. Standard deviation</p> <p>C. Mean deviation</p> <p>D. Variance</p>
47	The most common measures of absolute variability are also called	<p>A. Range</p> <p>B. Measures of spread</p> <p>C. Relative measures</p> <p>D. Mean deviation</p>
48	Relative measures have no	<p>A. Negative values</p> <p>B. Decimal values</p> <p>C. Units</p> <p>D. Value</p>
49	Sum of absolute deviations are minimum if computed from	<p>A. Mean</p> <p>B. Median</p> <p>C. Mode</p> <p>D. Range</p>
50	Mean deviation is always	<p>A. Greater than S.D</p> <p>B. Less than S.D</p> <p>C. Equal to S.D</p> <p>D. Negative</p>
		<p>A. Mean deviation</p> <p>B. Coefficient of variation</p>

51	The positive square root of the variance is referred to as the	B. Quartile deviation C. Standard deviation D. Range
52	The co-efficient of variation is also called	A. Mean deviation B. Quartile deviation C. Standard deviation D. Relative deviation
53	Mean deviation about the median is	A. Maximum B. Minimum C. zero D. 1
54	Lack of symmetry is called	A. Dispersion B. Moment C. Skewness D. Kurtosis
55	The first moment about mean is equal to	A. Mean B. Zero C. Median D. Mode
56	The measures of dispersion are changed by a change of	A. Origin B. Scale C. Algebraic sign D. None of these
57	The variance of a constant is	A. Constant B. Zero C. One D. None of these
58	The point in time at which the selected number was measured is referred to as the	A. Index number B. Base period C. Relative price D. Weighted Index
59	The index numbers are calculated in	A. Decimal B. Ratios C. Percentages D. Option "A" and "B"
60	The base period in fixed base should be	A. A normal year B. Average of normal years C. Any year D. None of these
61	Indices that involve a group of commodities are referred to as	A. Simple indices B. Common indices C. Aggregate indices D. Relative indices
62	The weighted price index is sometimes referred to as the	A. Simple price B. Composite index C. Multi index D. None of these
63	An index number calculated for more than one items is called	A. Composite B. Simple C. Relative D. None of these
64	If all items are given equal weight, the index number is called	A. Weighted B. Unweighted C. Relative D. Composite
65	In chain base method, the base period is	A. Fixed B. Not Fixed C. Constant D. None of these
66	In chain base year method, the _____ is fixed	A. Year B. Price C. Quantity D. Price and quantity
67	Link relatives are not directly comparable because they have	A. Fixed base B. Not fixed base C. Zero values D. None of these
68	Most of the decisions that affect our daily lives are based upon	A. Absolute certainty B. Likelihood C. Independent D. None of these

69	A well defined collection of distinct objects is called	A. Probability B. Chance C. Element D. A set
70	A set that contains no element is called	A. Null set B. Singleton set C. Zero set D. Infinite set
71	If a set contains a specific number of elements then it is called	A. Finite set B. Infinite set C. Universal set D. Disjoint set
72	A set consisting of all the elements of the sets under consideration is called the	A. Universal set B. Disjoint set C. Overlapping set D. Proper set
73	A set containing only one element is called	A. Disjoint set B. Singleton set C. Universal set D. Proper set
74	Probability of an event cannot be	A. Positive B. One C. Negative D. None of these
75	When a pair of dice is rolled, the sample space consists of	A. 6 outcomes B. 36 outcomes C. 12 outcomes D. 24 outcomes
76	When each outcome of a sample space is as likely to occur as any other, the outcomes are called	A. Mutually exclusive B. Exhaustive C. Equally likely D. None of these
77	If $P(B) = 0$ , then the conditional probability is	A. zero B. 1 C. undefined D. -1
78	A variable whose values depend upon the outcomes of a random experiment is called a	A. Constant B. Parameter C. Random variable D. Continuous variable
79	Random variable is also called	A. Changing B. Stochastic C. Chance or stochastic D. None of these
80	The sum of probabilities of events of a sample space is always	A. Zero B. One C. Two D. Infinity
81	The height of students, between 5.0 and 5.9 feet, is an example of	A. Discrete variable B. Continuous variable C. Constant D. Parameter
82	Recording the time (minutes) taken by the customers to wait for its turns in a utility store while standing in a queue, is an example of	A. Discrete variable B. Continuous variable C. Constant D. Parameter
83	The probability distribution of a discrete random variable is usually called its probability	A. Inverse function B. Mass function C. Density function D. Frequency function
84	The probability distribution of a discrete random variable is usually written with the help of a function, called its	A. Formula B. Variable C. Random variable D. Discrete variable
85	The probability density function of a continuous random variable Y is specified by a	A. straight line B. Rectangle C. Smooth curve D. Circle
86	The probability distribution of a discrete random variable can be described with the help of a two	A. Rows table B. Column table C. Circles D. Curves

87	The area under the probability density function is	A. 1 B. 0 C. Minimum D. None of these
88	The simplest form of the continuous distribution is the	A. Discrete uniform distribution B. Probability mass function C. Density function D. Continuous uniform distribution
89	In continuous distribution, $P(y=a)$ and $P(y=b)$ is always	A. Zero B. One C. Undefined D. Negative
90	The sum of probabilities of a discrete random variable is always	A. 0 B. 1 C. Infinity D. None of these
91	If "a" and "b" are constants, then $E(ax + b) =$	A. a B. a E (x) C. E (x) D. a E (x) + B
92	The shape of binomial distribution depends upon the value of its	A. Constants B. Parameters C. Variables D. Integers
93	Binomial distribution has two	A. Variables B. Constants C. Parameters D. None of these
94	The hypergeometric model is applied when samples are taken or selections are made, from a finite population	A. With replacement B. Without replacement C. With parameters D. None of these
95	The sum of probability of success and probability of failure in a binomial probability distribution is always	A. Zero B. One C. Less than 1 D. Greater than 1
96	The total area under normal curve is	A. Infinity B. unity C. zero D. greater than one
97	In normal probability distribution, all odd order moments about mean are	A. zero B. one C. maximum D. none of these
98	A population consists of unlimited number of elementary units	A. Continuous population B. Finite population C. Infinite population D. Mix population
99	A sample is a part of	A. Universe B. Mean C. Median D. Mode
100	Selecting a representative sample from a given population called	A. Finite population B. Sampling C. Infinite population D. None of these
101	The collecting of information from a part of the population is called making a	A. Census B. Complete enumeration C. Discrete sampling D. None of these
102	The heights of all the students enrolled at a college in a given year, is an example of	A. Infinite population B. Finite population C. Discrete sampling D. None of these
103	The results obtained by rolling a die, is an example of	A. Infinite population B. Finite population C. Option A & B D. None of these
104	A descriptive measure on the sample observation is called	A. Statistics B. Statistic C. Survev

		D. None of these
105	Probability sampling is also called	A. Random sampling B. Discrete sampling C. Continuous sampling D. Standard error
106	We refer the difference between the sample result and the true value as	A. Accuracy B. Error C. Precision D. Bias
107	The difference between the expected value of a statistic and the true value of the parameter being estimated is called	A. Accuracy B. Error C. Precision D. Bias
108	Bias is	A. Non random error B. Option A & C C. Cumulative D. None of these
109	A point estimate is a single number that is used to estimate an unknown	A. Constant B. Parameter C. Variable D. None of these
110	The branch of statistics concerned with using probability concepts to deal with uncertainty in decision making is called	A. Estimation B. Statistical Inference C. Point estimate D. None of these
111	A procedure of making judgment about the unknown value of a population parameter by using the sample observation is called	A. Statistical Inference B. Parameter C. Testing of hypothesis D. Statistical estimation
112	A sample statistic that is used to estimate the unknown true value of a population parameter is called	A. Point estimator B. Interval estimator C. Testing of hypothesis D. None of these
113	Population parameters are estimated from	A. Sample data B. Whole data C. Estimator D. Population interval
114	The statistical estimation of population is divided into	A. two types B. Three types C. cannot divided D. None of these
115	An estimator is always is	A. Constant B. Variable C. Parameter D. Statistic
116	A specific value of an estimator computed from the sample data after the sample has been observed is called	A. Point estimate B. Statistical Inference C. Statistic D. Parameter
117	When choosing an estimator of a population parameter, one should consider	A. Sufficiently B. Efficiency C. Option A & B D. None of these
118	Which of the following is/are unbiased estimators	A. Sample mean B. Sample proportion C. Sample variance D. All of these
119	_____ is the maximum variance unbiased estimator of the population variance	A. Estimator B. Statistic C. Sample mean D. All of these
120	A null hypothesis is always one of status quo or	A. effected B. having some difference C. having alternative D. no difference
121	The statement of the alternative hypothesis never contains a(n) _____ sign regarding the specified value of the parameter	A. equal B. greater than C. less than D. None of these
		A. rejected B. accepted

122	The null hypothesis ( $H_0$ ) is the hypothesis that is always	B. accepted C. zero D. tested
123	The null hypothesis always refers to a specified value of the	A. Population parameter B. Statistic C. Sample statistic D. None of these
124	The probability of a type 1 error is	A. Alpha B. beta C. Power curve D. None of these
125	Rejecting a null hypothesis, when it is true, is called	A. Row scale B. Simple hypothesis C. Type 1 error D. Type 2 error
126	For a particular test, $\alpha = 0.05$ and $\beta = 0.10$ . The power of this test is	A. 0.15 B. 0.90 C. 0.85 D. 0.95
127	For a two tailed test of hypothesis at $\alpha = 0.10$ , the acceptance region is the entire region	A. To the right of the critical value B. Between the two critical values C. Outside of the two critical values D. To the left of the positive critical value
128	If the critical region is located equally in both tails of the sampling distribution of test statistic, the test is called a	A. Two tailed test B. One tailed test C. Right tailed test D. Left tailed test
129	The two regression lines are perpendicular to each other if	A. $r = 1$ B. $r = 0$ C. $r = -1$ D. None of these
130	If the correlation coefficient $r = 0$ , the two regression lines are	A. Parallel B. Perpendicular C. Coincident D. Inclined at $45^\circ$ to each other
131	If $x$ and $y$ are independent variables, then two lines of regression are	A. $x = 0, y = 0$ B. $x = 0, y = \text{const}$ C. $x = \text{const}, y = 0$ D. $x = \text{const}, y = \text{const}$
132	If the sum of the product of deviations of $x$ and $y$ series from their means is zero, the correlation coefficient will be	A. 1 B. -1 C. 0 D. None of these
133	If $r = 1$ or $-1$ , the regression lines are	A. Parallel B. Inclined at the angle $\theta$ C. Perpendicular D. None of these
134	If the two regression coefficients are 0.8 and 0.2, then coefficient of correlation $r$ is	A. 0.4 B. -0.4 C. 1.6 D. None of these
135	If $r$ between the lines of regressions of $x$ and $y$ and $y$ on $x$ , is $\pm 1$ , then	A. Lines coincides B. Lines are perpendicular C. There is perfect correlation between $x$ and $y$ D. A, B and C
136	The purpose of simple linear regression analysis is to	A. Replace points on a scatter diagram by a straight line B. Measure the degree to which two variables are linearly associated C. Predict one variable from another variable D. None of these
137	The process of dividing the objects into two mutually exclusive classes is called	A. Variable B. Population C. Dichotomy D. Frequency distribution
138	The Greek letters $\alpha, \beta, \dots$ are used to denote the _____ of A, B, C, .....	A. Presence B. Inverse C. Absence



		<p><b>C. Negative</b></p> <p>D. None of these</p>
139	If A denote that the object possesses the attribute A, then $\alpha$ means	<p>A. <math>\langle \text{span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: small;"}\beta \langle \text{/span}\rangle</math></p> <p>B. Not <math>\langle \text{span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: small;"}\beta \langle \text{/span}\rangle</math></p> <p>C. Not <math>\langle \text{span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: small;"}\alpha \langle \text{/span}\rangle</math></p> <p><b>D. Not A</b></p>
140	The attributes denoted by A, B, ..... are called	<p><b>A. Positive attributes</b></p> <p>B. Negative attributes</p> <p>C. Contingency attributes</p> <p>D. None of these</p>
141	The degree of relationship between the two attributes is called	<p><b>A. Association</b></p> <p>B. Dichotomy</p> <p>C. Variable</p> <p>D. None of these</p>
142	The two attributes A and B are independent, if the co-efficient of association	<p><b>A. Equals to one</b></p> <p>B. Equals to zero</p> <p>C. Not equals to zero</p> <p>D. None of these</p>
143	The Classes $A\beta, \alpha B$ , etc. are called	<p>A. Positive classes</p> <p>B. Negative classes</p> <p>C. Negative of A and B</p> <p><b>D. Contrary classes</b></p>
144	If no attributes are specified, then the order of the class is	<p><b>A. 0</b></p> <p>B. 1</p> <p>C. n</p> <p>D. None of these</p>
145	The frequency of classes of the highest order are called	<p>A. Consistence of frequencies</p> <p><b>B. Ultimate class frequencies</b></p> <p>C. Independence of attributes</p> <p>D. None of these</p>
146	In the study of two attributes, $n =$	<p>A. <math>B + \langle \text{span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: small;"}\alpha \langle \text{/span}\rangle</math></p> <p>B. <math>(AB) + (AB)</math></p> <p>C. <math>AB + \langle \text{span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: small;"}\alpha B \langle \text{/span}\rangle</math></p> <p><b>D. <math>(A) + \langle \text{span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: small;"}\alpha \langle \text{/span}\rangle</math></b></p>
147	In the study of two attributes, $(B) =$	<p>A. <math>(A \langle \text{span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: small;"}\beta \rangle + \langle \text{/span}\rangle \langle \text{span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: small;"}\alpha B \langle \text{/span}\rangle</math></p> <p>B. <math>(AB) + (A \langle \text{span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: small;"}\beta \rangle</math></p> <p>C. <math>(B) + \langle \text{span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: small;"}\beta \rangle</math></p> <p><b>D. <math>(AB) + \langle \text{span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: small;"}\alpha \langle \text{/span}\rangle \langle \text{span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: small;"}\beta \rangle \langle \text{/span}\rangle</math></b></p>
148	The _____ is a systematic component of variation in a time series.	<p>A. Historigram</p> <p><b>B. Signal</b></p> <p>C. Noise</p> <p>D. Time period</p>
149	The _____ is an irregular component of variation in a time series	<p>A. Signal</p> <p><b>B. Noise</b></p> <p>C. Response</p> <p>D. None of these</p>
150	Which of the following would likely be a trend component of a time series	<p><b>A. Population growth</b></p> <p>B. Law suits</p> <p>C. Holidays</p> <p>D. Recessions</p>

151	Which of the following would likely be a seasonal component of a time series	A. Holidays B. Population growth C. Law suits D. None of these
152	The graph of the time series is called	A. Histogram B. Pie chart C. Bar diagram D. Historigram
153	A time series of annual data can contain which of the following components	A. Secular Trend B. Cyclical fluctuation C. Seasonal variation D. (A) and (B) only
154	A set of data depending on the time is called	A. Historigram B. Histogram C. Time series D. None of these
155	A _____ is a line or curve that shows the general tendency of a time series.	A. Historigram B. Seasonal variation C. Secular Trend D. None of these
156	In data of birth's and death's and epidemics as a result of advancement in medical sciences, the secular trend is usually	A. a downward tendency B. zero tendency C. an upward tendency D. None of these
157	The seasonal variations are	A. Long term movements B. Short term movements C. Cyclical fluctuations D. Secular trend
158	The cyclical fluctuations are	A. Long term oscillation B. Short term oscillation C. Secular oscillation D. None of these
159	A fire in a factory delaying production for 3 weeks is an example of	A. Seasonal variation B. Secular Trend C. Cyclical fluctuations D. Irregular Movements
160	Which one of the following is an example of seasonal variation	A. An increase in consumption of electricity in summer B. A steel strike, delaying production for a week C. A continually increasing demand for smaller automobiles D. None of these
161	Time series analysis is used to analyze data	A. Over different time periods B. Across different companies C. Across different companies and across different time periods D. That are qualitative
162	Exponential smoothing requires	A. Past values of the time series B. Current values of the time series C. Both past and current values of the time series D. Estimation of a time trend regression
163	1 GHz equals to	A. 1024 Hz B. $10^{4}$ MHz C. $10^{2}$ MHz D. 1024 MHz
164	A combination of characters, numbers and symbols for specific purpose is called	A. Bytes B. Data C. MB D. None of these
165	Number of instructions processed in one second is called _____ of computer	A. Accuracy B. Speed C. Frequency D. None of these
166	_____ is a measure of number of vibration per second	A. Frequency B. Speed C. Hertz D. Bytes
167	The number of pulses generated in one second is called _____	A. Accuracy B. Frequency C. Hertz

168	The unit of frequency is	A. Hertz B. Bytes C. Mega bytes D. None of these
169	The main function of a computer is	A. Data storage B. Speed C. Data Processing D. None of these
170	Computer means	A. Complete B. Processing C. Data D. Calculate
171	The CPU of a digital computer consists of	A. ALU B. Main memory C. Control unit D. All of the above
172	A collection of eight bits is called	A. Byte B. Word C. Record D. File
173	Computer memory	A. Performs all calculations B. Receives input data C. is extremely limited D. is better than human memory
174	A computer stores instructions in	A. English language B. Octal Number System C. Binary Number System D. Decimal Number System
175	A computer can execute	A. a flow chart B. a program C. an algorithm D. all of the above
176	Which of the following is not a hardware	A. Compiler B. CPU C. Chip D. Memory unit