ICS Part 2 Statistics Online Test

Sr	Questions	Answers Choice
1	The normal distribution is --------------------distribution.	A. positively skewed B. negatively skewed C. symmetrical D. peaked
2	The probability density function has ------------------ value for every value of x.	A. negative B. positive C. minimum D. maximum
3	Second moment about mean is also called	A. mean B. variance C. skewness D. standard deviation
4	In case of normal distribution maximum value of ordinate is	A. μ B. Zero
5	The moment coefficient of skewness is	A. β_1 B. β_2 C. S_k D. m_3
6	The moment Coefficient of kurtosis is	A. β_1 B. β_2 C. Zero D. m_2
7	In case of normal distribution the area to the left of the mean and area to the right of the mean is	A. positive B. negative C. equal D. unequal
8	Normal distribution is	A. unimodal B. bimodal C. trimodal D. multimodal
9	The shape of the normal distribution is like	A. J. B. L C. bell D. circle
10	The range of a normal distribution is	A. $-\infty$ to 1 B. $-\infty$ to 0 C. $-\infty$ to +

		D. 0 to ∞
11	Total probability under the normal curve is	A. 1 B. 0 C. -1 D. ∞
12	All odd order moments about mean are	A. unique B. zero C. different D. one
13	Points of inflexion of normal curve are at	A. μ and σ B. x=μ-σ and x=μ+σ C. μ and 2σ D. μ = o
14	P (| Z | > a) =	A. 2ø(a) - 1 B. ø(a) C. 2 ø (-a) D. 1-ø(a)
15	P(μ-2σ < X=< μ + 2σ)=	A. 0.6827 B. 0.9545 C. 0.9973 D. 0.9827
16	A complete list of elements in a population is called	A. population B. sampling design C. sampling frame D. sampling unit
17	In a systematic sampling every ------------ unit is selected	A. 1st B. last C. xth D. normal
18	The probability distribution of proportions is called	A. proportional distribution B. population distribution C. sample distribution D. sampling distribution
19	The difference of the true value of population parameter and corresponding value of sample statistic is called	A. non-sampling error B. sampling error C. random error D. none of these
		A. sample B. statistic

20	A descriptive measure of a population is called	B. statistic C. parameter D. erro
21	The error which arises due to faulty sampling frames and processing of data is called	A. random error B. sampling error C. non-sampling error D. systematic error
22	One of the great advantages of sampling is	A. waste time B. save time C. use time D. need time
23	Non probability form of sampling is	A. quota sampling B. sampling with replacement C. sampling without replacement D. none of these
24	The descriptive measure on the sample observation is called ------------------	A. parameter B. statistic C. error D. true value
25	Another name of probability sampling is	A. quota sampling B. simple sampling C. stratified sampling D. random sampling
26	Random sampling provides reliable -------------------	A. values B. attributes C. variables D. estimates
27	Sampling in which a sampling unit can be selected more than once is called	A. simple sampling B. sampling with replacement C. sampling without replacement D. none of these
28	A part of the population is called	A. parameter B. statistic C. sample D. both b and c
29	The population must be defined in terms of	A. content B. unit C. extent D. all of these
30	If sampling is done without replacement then no	A. N^n B. ^NC_n C. $^Np_{"}$ D. $N \times N$
31	A specific value of an estimator computed from the sample data is called	A. estimation B. estimate C. interval estimate D. point estimate
32	The precision can be increased by ---------------- the sample size	A. increasing B. decreasing C. changing D. ignoring
33	Large sample contains more than	A. 5 values B. 10 values C. 20 values D. 30 values
34	Level of significance is denoted by	A. 2 - α B. 3 - α C. α D. 1 - α
35	The difference of upper and lower limits of confidence interval measures the	A. level of significance B. level of confidence C. interval D. precision
36	Small sample has less than	A. 50 values B. 45 values C. 30 values D. 35 values
37	The standard error of the estimate increased by decreasing	A. population B. sample size C. errors D. precision

38	If mean of the sampling distribution is equal to the parameter then the estimator will be	A. biased B. consistent C. sufficient D. unbiased
39	A range of values used to estimate an unknown population parameter is	A. a point estimator B. An interval estimator C. an unbiased estimator D. A biased estimator
40	If the observations are paired and the number of pairs is n, then the number of degree of freedom is equal to	A. n B. n - 1 C. 2n D. 2n - 1
41	An estimator is ------------ if its expected value is equal to the population parameter to be estimated	A. bad B. biased C. unbiased D. none of these
42	$100(1-\alpha)\%$ confidence interval for population proportion of success, π is	A. $P (L < \mu < U) = 1 - \alpha$ B. $P (L < \sigma < U) = 1 - \alpha$ C. $P (L < \pi < U) = 1 - \alpha$ D. $P (L < P < U) = 1 - \alpha$
43	Confidence intervals which are often used in practice are	A. 90% B. 95% C. 98% D. all of these
44	Types of statistical inferences are	A. one B. two C. three D. four
45	The hypothesis which is tested for possible rejection is called	A. common hypothesis B. null hypothesis C. alternative hypothesis D. wrong hypothesis
46	The alternative hypothesis always contains the sign of	A. equality B. inequality C. ratio D. proportion
47	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
48	A region for which the H_o is rejected is called	A. acceptance region B. rejection region C. critical region D. both b and c
49	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
50	If we reject Ho when Ho is actually true then it is	A. type - I error B. type - II error C. type - III error D. type - IV error
51	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
52	A ---------------- error is made by accepting H_o if H_1 is actually true	A. type - I B. type - II C. type - III D. type - IV
53	If the null hypothesis is false, we many accept it leading to a ----------- decision	A. true B. correct C. wrong D. none of these
54	A statistical hypothesis is an assertion or conjecture about the distribution of random variables	A. one B. two C. one or more D. three
		A. H_o : μ = 16000 kilometers B. H_o : $\mu \leq$ 16000 kilometers

55	An automobile is driven on the average on more than 1600 kilometers per year, the null hypothesis is	16000 kilometers C. H_o : µ < 16000 kilometers D. H_o : µ > 16000 kilometers
56	Hypothesis that does not completely specify the underlying population distribution is called	A. simple hypothesis B. dual hypothesis C. composite hypothesis D. common hypothesis
57	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
58	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
59	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
60	If Ho: µ <µoand H1:µ <µoand level of significance is=α then Ho will be rejected if	A. $Z < Z=\alpha$ B. $Z < Z=\alpha/2$ C. $Z < Z_{1-\alpha}$ D. $Z < Z_{1-\alpha/2}$
61	If Ho:π >πo , H1:π <πo and level of significance is=α then Ho will be rejected if	A. $Z < Z=\alpha$ B. $Z=\alpha/2 < Z$ C. $Z > Z_{1-\alpha}$ D. $Z < Z_{1-\alpha}$
62	The relationship that describes the dependence of the expected value of the dependent random variable for a given value of the independent non-random variable is called	A. equation B. relation C. ratio D. regression
63	The variable that forms the basis of estimation is called	A. regression B. regressand C. regressor D. correlation
64	A set of points in a rectangular coordinate system, where each point represents an observed pair of values is called	A. least square regression B. scatter diagram C. pie graph D. regression coefficient
65	The estimates of the parameters=α and=β are	A. µ and=σ2 B. a and b C. µ andπ D. χ2 and Z
66	r is the ----------- of two regression co-efficient b_{yx} and b_{xy}	A. arithmetic mean B. geometric mean C. harmonic mean D. median
67	If b_{yx} = 0.89 and b_{xy} = 0.75, then r=	A. 0.89 B. 0.28 C. 0.98 D. 0.82
68	If r = -1, then there is	A. negative correlation B. perfect negative correlation C. no correlation D. average correlation
69	The measures of strength of closeness of linear relationship between two variables is called	A. simple linear regression B. composite linear regression C. simple linear correlation D. composite linear correlation
70	If constants are added to or subtracted from the values of the variables, the value of r	A. is negative B. is positive C. is zero D. remains unchanged
71	r_{xy} ------------- r_{yx}	A. = B. < C. > D. ≠
		A. b_{yx} = 0

72	If X and Y are independent, then Cov(x,y) = 0 which implies that	B. b_{xy} = 0 C. ρ = 0 D. a = 0
73	A characteristic which varies in quality form one individual to another is called	A. variable B. constant C. attribute D. none of these
74	A process of dividing the objects into two mutually exclusive classes of an attribute is called	A. classification B. trichotomy C. dichotomy D. association
75	Degree of linear relationship between two variables is called	A. regression B. association C. correlation D. disassociation
76	The degree of relationship between the two attributes is called	A. regressor B. correlation C. regressand D. association
77	(AB), (Aβ), (αB), (αβ) are called	A. positive class frequencies B. negative class frequencies C. natural class frequencies D. ultimate class frequencies
78	n = (A) + --------------------	A. (B) B. (α) C. (β) D. (A)
79	(α) = (αB) + ------------------	A. (Aβ) B. (AB) C. (αβ) D. (A)
80	The value of coefficient of association lies between	A. 0 and + 1 B. -1 and + 1 C. -1 and 0 D. -0.5 and + 0.5
81	The critical region of=χ2distribution is	A. χ2 <χ2v; 1-α B. χ2 <χ2v;1-α C. χ2 <χ2 v;1-α/2 D. χ2 <χ2v;1-α/2
82	If any ultimate class frequency is negative the data will be	A. inconsistent B. consistent C. correlated D. composite
83	When the expected frequencies are very small the value of=χ2has been	A. adjusted B. omitted C. changed D. all of these
84	The sample size n is reasonably large so that for each cell, the estimated expected frequency must be at least	A. 2 B. 3 C. 4 D. 5
85	The graph of a time series is called	A. histogram B. polygon C. straight line D. historigram
86	The secular trend is measured by the method of semi-averages when	A. time series contains yearly values B. trend is linear C. time series contains odd number of values D. none of these
87	In the measurement of secular trend the moving averages	A. give the trend in a straight line B. measure the seasonal variations C. smoothes out a time series D. measure irregular fluctuations
88	The straight line is fitted to a time series when the movements in the time series are	A. linear B. quadratic C. cubic D. constant
89	The least squares estimates are unbiased estimates of the	A. statistic B. time series C. parameters

		D. variance
90	The elimination or addition of a few more time periods may change its	A. speed B. value C. direction D. none of these
91	Sum of squares of residuals is denoted by	A. $\sum e$ B. $\sum e^2$ C. $\sum e^3$ D. $\sum e^4$
92	The method of least square gives too much weight to extremely large deviations from the	A. population B. parameter C. sample D. trend
93	Methods of semi-averages gives an	A. accurate result B. objective result C. authentic result D. none of these
94	Which one is a rough and crude method for measuring secular trend ?	A. free hand curve method B. semi average method C. moving averages method D. least square method
95	A business cycle has	A. one phase B. two phases C. three phases D. four phases
96	Commonly used input device is	A. pen B. keyboard C. monitor D. joystick
97	1MB equals	A. 1048576 bytes B. 1024 bytes C. 2048 bytes D. 2380 bytes
98	Screen output is considered as a	A. softcopy B. hardcopy C. screen copy D. print copy
99	CD-ROM is a type of	A. hard disk B. soft disk C. floppy disk D. optical disk
100	Which one is called as a set of electronic instructions ?	A. hardware B. software C. hardcopy D. softcopy
101	The most common type of computer memory is called	A. ROM B. REM C. RAM D. RIM
102	A high speed memory that is built in processor is called	A. built in memory B. cache memory C. internal memory D. external memory
103	RAM is called	A. primary storage B. secondary storage C. tertiary storage D. tetra storage
104	Arithmetic operations are carried out by ---------------- unit	A. logical B. inner C. ALU D. other
105	Keyboard, mouse and scanner are the ---------- devices	A. input B. output C. logical D. mini
106	Assembly language is also known as	A. objective language B. syntax language C. character language

107	Monitors, PC projectors and sound systems are	A. soft copy output devices B. real copy output devices C. raw copy output devices D. hardcopy output devices
108	Which output is permanent ?	A. hard copy B. real copy C. soft copy D. none of these
109	The most common measurement unit for describing a computer's memory is	A. bits B. mega bytes C. bytes D. kilobytes
110	Super computers can perform more than ---------------- calculations per second ?	A. 1 million B. 1 billion C. 1 trillion D. 1 lac
111	Data is defined as combination of	A. character and numbers B. characters and symbols C. numbers and symbols D. characters, number and symbols
112	Machine language is in the form of	A. 1 and 2 B. 0 and 1 C. 1 and 3 D. 0 and 3
113	In case of normal distribution maximum value of ordinate is	A. μ B. Zero
114	In case of symmetrical distribution	A. $\mu_1 = \mu_2 = \mu_3 = \mu_4$ B. $\beta_1 = \beta_2$ C. $P_1 < P_2$
115	Question Image	A. β_1 B. β_2 C. β_3 D. S_k
116	If sampling is done without replacement then σ =	
117	If sampling is done with replacement the σ_p =	
118	If population proportion (P) is unknown, the standard error of the sample proportion (p) can be estimated by the formula	
119	Question Image	A. biased B. unbiased C. positively biased D. none of these
120	Question Image	A. best estimators B. biased estimators C. unbiased estimators D. normal estimators
121	Regression line x on y is	
122	Question Image	A. y-intercept B. x-intercept C. slope D. none of these
123	Question Image	A. S_{xy} B. S_{yx} C. b_{xy} D. b_{yx}
124	Question Image	B. b_{yx} C. b_{xy} D. S_p
125	Question Image	A. 37 B. 132 C. 32 D. cannot be calculated
126	The estimated regression line always passes through	A. origin C. x-axis D. y-axis

#	Question	Options
127	Question Image	A. independent B. positively associated C. negatively associated D. correlated
128	The two attributes A and B are negatively associated if	
129	C= -----------------------------	
130	Question Image	A. Φ^2 B. q^2 C. α^2 D. β^2
131	Question Image	A. $6\Sigma d_1$ B. $5\Sigma d^1$ C.
132	For a least squares linear trend=ŷ = a + bx, b is the	A. variable B. intercept C. trend D. slope
133	For a least squares linear trend=ŷ= a + b x,	A. $\Sigma y < \Sigma \hat{y}$ B. $\Sigma \hat{y} = 0$ C. $\Sigma y = \Sigma \hat{y}$ D. none of these
134	For a least squares linear trend ŷ = a + bx, the $\Sigma(y-\hat{y})^2 = 0$ when	A. all the y-values lie on the line B. all the y-values are positive C. all the y-+values lie above the line D. none of these
135	The equation of the quadratic (parabolic) trend is	A. $\hat{y}=a+bx$ B. $\hat{y}=a+by$ C. $\hat{y}=a+b\Sigma x+c\Sigma x^2$ D. $\hat{y}=a+bx+cx^2$
136	ŷ=a+bx, this line will be called least squares line if it makes=Σ(y-a-bx)2	A. maximum B. constant C. minimum D. variable
137	The sum of deviations=Σ(y-ŷ) =	A. 0 B. 1 C. 10 D. -1
138	The total area under the normal curve is_____.	A. Zero B. Equal C. Unity D. True
139	Normal distribution ranges from_____.	A. 1,2,3,............∞ B. -∞ to +∞ C. 1,2,3,.........n D. None of these
140	The maximum ordinate of a normal curve is at X = _____.	A. μ B. σ C. X̄ D. S.D
141	The normal distribution is a _____.	A. Positive B. Negative C. Discrete D. Continuous
142	The normal distribution is a bell shaped_____ distribution.	A. Discrete B. Continuous C. Symmetrical D. Skewed
143	In normal distribution.	A. Mean > median > mode B. Mean = median = mode C. Mean < median < mode D. None of these
144	The Quartile deviation (Q.D) of a normal distribution is_____.	A. 4/5 σ B. 5/4 σ C. 2/3 σ D. None of these
145	The mean deviation (M.D) of a normal distribution is _____.	A. 4/5 σ B. 5/4 σ C. 2/3 σ D. None of these

146	The point of inflection in normal distribution are _____.	A. $\mu - \sigma, \mu + \sigma$ B. $\mu - \sigma, \mu + 2\sigma$ C. μ, σ D. None of these
147	If X - N (50,25), then=σ = _____.	A. 3 B. 5 C. 25 D. 50
148	The maximum ordinance of the standard normal Curve is at Z = _____.	A. 1.96 B. 2.33 C. 1 D. 0
149	$\mu - 2\sigma$ to=$\mu + 2\sigma$ contains approximately_____ area.	A. 75% B. 50% C. 95.45% D. 99.73%
150	For normal distribution mean always lies between.	A. Median and mode B. Median and Q_1 C. Median and Q_3 D. None of these
151	In a normal distribution,_____= $\mu + 0.64745\ \sigma$	A. Q_1 B. Q_3 C. μ D. σ
152	All odd ordered moments about mean are _____ in a normal distribution.	A. Zero B. Unity C. Positive D. Negative
153	The normal distribution is represented as_____	A. $N(\mu, \sigma^2)$ B. $N(n, p)$ C. $N(0, \sigma^2)$ D. None of these
154	In a normal distribution $\beta_1 = 0$ and $\beta_2 = $_____.	A. 2 B. 4 C. 3 D. 5
155	Sample is a sub-set of _____.	A. Population B. Data C. Set D. Distribution
156	List of all the units of the population is called_____.	A. Random sampling B. Bias C. Sampling frame D. Probability sampling
157	The descriptive measures of a population are called_____.	A. Census B. Parameter C. Statistics D. Bias
158	The difference between a statistic and the parameter is called_____.	A. Random B. Non-random C. Sampling error D. Probability
159	Study of the population is called_____.	A. Parameter B. Error C. Statistic D. Census
160	Another name of probability sampling is_____ sampling.	A. Random B. Non-random C. Error D. Bias
161	A population is called _____ if it includes an unlimited number of sampling units.	A. Finite B. Infinite C. Statistic D. None of these
162	Random sampling provide reliable _____.	A. Samples B. Units C. Estimates D. Frame
163	A sample is usually selected by _____.	A. With B. Without

		C. Finite D. Infinite
164	The bias increases by increasing the sample_____.	A. Unit B. Number C. Size D. None of these
165	The S.D of the sampling distribution of a statistics is called _____.	A. Standard error B. Serious error C. Dispersion D. Difference
166	In N is the size of population and N is the size of sample then possible samples that can be drawn with replacement are.	A. N/n B. N^n C. Nen D. None of these
167	Probability distribution of a statistic is called:	A. Sampling B. Parameter C. Data D. Sampling distribution
168	A numerical characteristic calculated from sample is called:	A. Sample unit B. Sample design C. Statistic D. Parameter
169	If the population is finite, the standard error of mean is given by:	A. $\sigma/\sqrt{n}$ B. $\sigma/\sqrt{n}\ \sqrt{N-n}/N-1$ C. $\sigma/\sqrt{n}\ \sqrt{N-1}/N-n$ D. $\sigma/\sqrt{}\ \sqrt{1-n}/N$
170	Is sampling without replacement, an element can be chosen:	A. Less than once B. More than once C. Only once D. Difficult to tell
171	The process of making estimates about the population parameter from a sample is called:	A. Statistical independence B. Statistical inference C. Statistical hypothesis D. Statistical decision
172	Statistical inference has two branches namely:	A. Level of confidence and degrees of freedom B. Biased estimator and unbiased estimator C. Point estimate and interval estimate D. Estimation of parameter and testing of hypothesis
173	Estimation is of two types:	A. One sides and two sides B. Type I and type II C. Point estimation and interval estimation D. Biased and unbiased
174	A single value used to estimate a population value is called:	A. Interval estimate B. Point estimate C. Confidence interval D. Level of confidence
175	Statistic is an estimator and its calculated value is called:	A. Biased estimate B. Estimation C. Interval estimate D. Estimate
176	Estimate is the observed value of an:	A. Unbiased estimator B. Estimation C. Estimator D. Interval estimation
177	A range of values within which the population parameter is expected:	A. Confidence interval B. Confidence coefficient C. Confidence limits D. Level of significance
178	The endpoints of a confidence interval are called:	A. confidence coefficient B. Confidence limits C. Error of estimation D. Parameters
179	The probability associated with confidence interval is called:	A. Level of confidence B. Confidence coefficient C. Both A and B D. Confidence limits
180	(1-α) is called:	A. Critical value B. Level of significance C. Level of confidence

		D. Interval estimate
181	If (1-α) is increased, the with of a confidence interval is:	A. Decreased B. Increased C. Constant D. Same
182	By increasing the sample size, the precision of confidence interval is:	A. Decreased B. Increased C. Constant D. Unchanged
183	The distance between an estimate and the estimated parameter is called:	A. Sampling error B. Standard error C. Bias D. Error of estimation
184	The following statistic are unbiased estimators:	A. The Sample mean B. S^2 = $\Sigma(X - X)^2$/n-1 C. The sample proportion D. All the above
185	If 1-α = 0.90, the value of $Z_{a/2}$ is:	A. 1.645 B. 1.96 C. 2.326 D. 2.575
186	A statement about the value of a population parameter is called:	A. Null hypothesis B. Alternative hypothesis C. Simple hypothesis D. Composite hypothesis
187	A quantitative statement about a population is called:	A. Research hypothesis B. Composite hypothesis C. Simple hypothesis D. Statistical hypothesis
188	The alternative hypothesis is also called:	A. Null hypothesis B. Statistical hypothesis C. Research hypothesis D. Simple hypothesis
189	A hypothesis that specifies all the value of parameter is called:	A. Statistical hypothesis B. Simple hypothesis C. Composite hypothesis D. None of these
190	The choice of one-tailed test and two tailed test depends upon:	A. Composite hypothesis B. Null hypothesis C. Alternative hypothesis D. Simple hypothesis
191	1 - α is call:	A. Confidence coefficient B. Power of the test C. Size of the test D. Level of significance
192	1 - α is the probability associated with:	A. Type-I error B. Type-II error C. Level of confidence D. Level of significance
193	Level of significance is also called:	A. Power of the test B. Size of the test C. Level of confidence D. Confidence coefficient
194	P(type I error) is equal to:	A. 1 - α B. 1 - β C. α D. β
195	P(type II error) is equal to:	A. α B. β C. 1 - α D. 1 - β
196	Which hypothesis is always in an inequality form?	A. Simple hypothesis B. Alternative hypothesis C. Null hypothesis D. Composite hypothesis
197	The power of the test is equal to:	A. α B. 1 - α C. β D. 1 - β
		A. β

198	The degree of confidence is equal to:	B. $1 - \beta$ C. $1 - \alpha$ D. α
199	Suppose that the null hypothesis is true and it is rejected, is known as:	A. α type-I error, and its probability is β B. α type-I error, and its probability is α C. α type-II error, and its probability is α D. α type-II error, and its probability is β
200	Which of the following is not composite hypothesis?	A. $\mu < \mu^{\wedge}$ B. $\mu > \mu_0$ C. $\mu = \mu_o$
201	Given=$\mu_0 = 170$, $\overline{X} = 190$, $\sigma = 36$ and $n = 9$; which statistic is appropriate?	A. t B. z C. x2 D. F
202	An example in a two-sided, alternative hypothesis is:	A. H_1 :u < 0 B. H_1 : u > 0 C. H_1 L u > 0 D. H_1 : u $\neq 0$
203	A process by which we estimate the value of dependent variable on the basis of one or more independent variable is called_____.	A. Residual B. Correlation C. Regression D. Slope
204	The variable, that forms the basis of estimation, is called_____.	A. Regression B. Regressor C. Regressand D. Estimated
205	A relationship where the flow of the data points is best represented by a curve is called_____.	A. Linear positive B. Linear negative C. Linear relationship D. Nonlinear relatiobship
206	A data points falling along a straight line is called_____.	A. Linear relationship B. Non-linear relationship C. Linear positive D. Scatter diagram
207	The variable, whose resulting value depends upon the selected value of the independent variable is called_____.	A. Regression B. Regressor C. Regressand D. Coefficient
208	The _____ regression line always passes through ($\overline{X}$, $\overline{y}$).	A. Opposite B. Estimated C. Estimates D. Random
209	If the value of any regression coefficient is zero, then two variable are _____.	A. Qualitative B. Correlation C. Dependent D. Independent
210	In simple linear regression, the number of unknown constants are:	A. Two B. Three C. Four D. Five
211	The straight line graph of the linear equation $Y = a + bX$, the slope will be upward it_____.	A. b = 0 B. b < 0 C. b > 0 D. b $\neq 0$
212	When b_{xy} is positive, then b_{yx} will be _____.	A. Negative B. Positive C. Zero D. One
213	The regression equation always passes throught_____.	A. (X, Y) B. (X, $\overline{y}$) C. ($\overline{X}$, Y) D. ($\overline{X}$, $\overline{y}$)
214	The value of the coefficient of correlation relies between_____.	A. -1 and +1 B. 0 and 1 C. -1 and 0 D. -0.5 and + 0.5
215	A characteristic which varies in quantity from one individual to another is called	A. Association B. Correlation

| 215 | a_____. | C. Variable |
| | | D. Attribute |

216	A characteristic which varies in quality from one individual to another is called an_____.	A. Variable
		B. Attribute
		C. Associated
		D. Independent

217	The degree of relationship between the two attributes is called_____.	A. Association
		B. Correlation
		C. Contingency
		D. Quantitative

218	The two attribute A and B are positively associated, if _____.	A. $(AB) = (A)(B)/n$
		B. $(AB) < (A)(B)/n$
		C. $(AB) \neq (A)(B)/n$
		D. $(AB) > (A)(B)/n$

219	The two attributes A and B are _____associated, If $(AB) < (A)(B)/n$.	A. Positively
		B. Negatively
		C. Zero
		D. Symmetrical

220	If $(AB) = (A)(B)/n$, the two attributes. A and B are _____.	A. Independent
		B. Dependent
		C. Correlated
		D. Quantitative

221	The degree of linear relationship between two variable is called_____.	A. Dependent
		B. Association
		C. Positive
		D. Correlation

222	If two attributes A and B are independent, then co-efficient of association is_____.	A. -1
		B. +1
		C. 0
		D. 0.5

223	If two attributes A and B have perfect positive association value of the coefficient of association is equal to _____.	A. +1
		B. -1
		C. 0
		D. (r-1)(c-1)

224	Chi-square curve ranges from:	A. $-\infty$ to $+\infty$
		B. 0 to ∞
		C. $-\infty$ to 0
		D. 0 to 1

225	For an r x c contingency table, the number of degrees of freedom are equal to:	A. rc
		B. r + c
		C. (r-1)+(c-1)
		D. (r-1)(c-1)

226	The shape of the chi-square distribution depends upon_____.	A. Parameters
		B. Number of cells
		C. Degrees of freedom
		D. Standard deviation

227	The value of chi-square statistic is always _____.	A. Negative
		B. Non-negative
		C. Zero
		D. One

228	For a 3 x 3 contingency table, the number of cells in the table are _____.	A. 3
		B. 4
		C. 6
		D. 9

229	The total area under the curve of chi-square distribution is_____.	A. 1
		B. 0.5
		C. 0 to ∞
		D. $-\infty$ to $+\infty$

230	The process of dividing the objects into two mutually exclusive classes is called_____	A. Bichotomy
		B. Trichotomy
		C. Dichotomy
		D. Multichotomy

231	If $6\Sigma d^2/n(n^2 - 1)$ is zero, the value of r_s is _____.	A. 0.5
		B. 1
		C. -1
		D. 0

232	The graph of time series is called:	A. Histogram
		B. Historigram
		C. Straight line
		D. Ogive

233	The basic components of a time series are:	A. 2 B. 3 C. 4 D. 5
234	The secular trend is measured by the method of semi-averages when:	A. Time series contains yearly value B. Trend is linear C. Time series contains odd number of values D. None of them
235	In the measurement of secular trend the moving averages:	A. Give the trend in a straight line B. Measure the seasonal variations C. Smooth out a time series D. None of these
236	The unsystematic sequence which follows irregular pattern of variations is called:	A. Noise B. Signal C. Linear D. Non-linear
237	In time series seasonal variations can occur within a period of:	A. Nine years B. Four Years C. Three years D. One year
238	Increase the number of patients in the hospital due to heel stock is:	A. Seasonal trend B. Secular trend C. Cyclical movements D. Irregular variation
239	The systematic components of time series which follow regular pattern of variations are called:	A. Noise B. Signal C. Additive model D. Multiplicative model
240	In a straight line equation $Y = a + bX$; a is the:	A. X - intercept B. Slope C. Y- intercept D. None of them
241	For a least squares line trend $Y = a + bx$, the b is the:	A. Intercept B. Slope C. Variable D. Trend
242	For a least squares linear trend $Y = a + bX$	A. ΣY = ΣY B. ΣY = 0 C. ΣY > ΣY D. None of them
243	The rise and fall of a time series periods longer than one- year is called.	A. Secular trend B. Seasonal variation C. Cyclical variation D. Irregular variation
244	The multiplicative time series model is:	A. $Y = T + S + C + I$ B. TSCI C. $Y = a + bX$ D. $Y = a + bX + cX^2$
245	The trend values in freehand curve method are obtained by:	A. Equation of straight line B. Second degree parabola C. Signal D. Graph
246	The additive model of the time series is:	A. $Y = T + S + C + I$ B. TSCI C. $Y = a + bX$ D. $Y = a + bX + cX^2$
247	For a least squares linear trend $Y = a + bx$, the $\Sigma(Y - Y)^2 = 0$ when:	A. All the Y-values are positive B. All the Y-values lie on the line C. All the Y-values lie above the line D. None of these
248	In moving average method, we cannot find the trend values of some:	A. Middle periods B. End periods C. Starting periods D. Between extreme periods
249	Keyboard is commonly used_____device.	A. Output B. Input C. Primary D. Secondary
250	One byte equal:	A. 4 bits B. 6 bits C. 8 bits

D. 12 bits

251	Drag and drop is a term associated with:	A. Mouse B. Keyboard C. Printer D. Scanner
252	1 MB equals _____byes	A. 1,094,265 B. 1,904,265 C. 1,904,265 D. 1,048.576
253	Screen output is considered as a _____.	A. Hardcopy B. Softcopy C. Input D. Software
254	Joystick is an example of:	A. Input devices B. Output devices C. Processing devices D. Storage devices
255	A binary digit is commonly called:	A. Byte B. Kilobyte C. Gigabyte D. Bit
256	_____ is a set of electronic instructions:	A. Hardware B. Software C. Hard disk D. Compact disk
257	The most common type of computer memory is called:	A. ALU B. ENIAC C. RAM D. ROM
258	RAM is called_____storage.	A. Primary B. Secondary C. Control D. Scanner
259	The _____ allow you to type information into the computer.	A. Mouse B. Scanner C. Printer D. Keyboard
260	Arithmetic operations are carried out by_____ units:	A. CPU B. RAM C. ALU D. ROM
261	CD-ROM is a type of _____.	A. Optical disk B. Hard disk C. Soft disk D. Compact disk
262	1 kb = _____ bytes	A. 10 B. 100 C. 1000 D. 10,000
263	A complete computer system has_____ parts.	A. 2 B. 3 C. 4 D. 5
264	The first commercially available computer was:	A. ENIAC B. UNIVAC C. Mark I D. Analytical engine
265	Super computers can process million of instructions:	A. Per second B. Per microsecond C. Per minute D. Per hour