2017 (A)

Roll No: ____

INTERMEDIATE PART-II (12th CLASS)

STATISTICS PAPER-II (NEW SCHEME) (SESSION 2015-2017)

TIME ALLOWED: 2.40 Hours

SUBJECIVE

MAXIMUM MARKS: 68

NOTE: - Write same question number and its part number in answer book, as given in the question paper.

SECTION-I

Attempt any eight parts.

 $8 \times 2 = 16$

- Write the parameters of Normal Distribution.
- (ii) Define Normal Probability density function.
- (iii) In Normal distribution $\mu = 20$, $\sigma = 4$ find $P(16 \le x \le 24) = ?$
- (iv) In Normal distribution Mean Deviation is = 4. Find Q.D and S.D.
- (v) What are values of Moments Ratios ie β_1 & β_2 in Normal distribution?
- (vi) Differentiate between Point estimation and Interval estimation.
- (vii) Write down unbiased estimator of population variance i.e σ^2 .
- (viii) Define Composite Hypothesis.
- (ix) Differentiate between Type I error and Type II error.
- (x) What is Test Statistic?
- (xi) What is Data Processing?
- (xii) Write note on CPU.

Attempt any eight parts.

 $8 \times 2 = 16$

- (i) Differentiate between Sampling with replacement and Sampling without replacement.
- (ii) Define Sampling Error.
- (iii) Define Sampling Unit and Population.
- (iv) Enlist any four advantages of Sampling
- (v) If $\mu = 5$ and $\sigma^2 = 2.25$ what would be value of $S.E(\overline{X})$, if sample of size 4 are drawn with replacement.
- (vi) What is meant by Bias?
- (vii) If $b_{xy} = 0.27$, $b_{yy} = 0.60$ Find $r_{yy} = 7$
- (viii) For a give set of data $S_x^2 = 16$, $S_{xy} = 36$, $r_{xy} = 0.48$, compute the value of $S_y = ?$
- (ix) Define the term Correlation.
- (x) Write the relationship between Regression coefficient and Correlation coefficient.
- (xi) Define the principle of Least Square.
- (xii) What do you understand by Simple Linear Regression?

Attempt any six parts.

 $6 \times 2 = 12$

- Explain the terms Positive and Negative Attributes.
- (ii) What do you understand by Association?
- (iii) Given n = 100; (A) = 40. Find (α)
- (iv) What is meant by Independence of Attributes?
- (v) What is meant by Analysis of Time series?
- (vi) Explain the term Noise.
- (vii) Define the term Cyclical Variation.
- (viii) What are the different components of Time series?
- (ix) What is the additive model in time series?

SECTION-II

NOTE: - Attempt any three questions.

- 5.(a) Let $X \hookrightarrow N(20, 25)$ find the area under the normal curve (i) below 30 (ii) above 30 4
 - (b) A random variable X is normally distributed with mean 500 and standard deviation 100. What is the 95th percentile of the distribution?
- 6.(a) Take all possible samples of size 3 without replacement from a population 2, 3, 4, 5 and 6. Find mean of each sample and show that $\mu \bar{x} = \mu$
 - (b) Given $n_1 = 2$ $n_2 = 2$ $\mu_1 = 6$ $\mu_2 = 2$ $\sigma_1^2 = 2.67$ $\sigma_2^2 = 0.67$ Find $\mu(\overline{X}_1 - \overline{X}_2)$ and $\sigma(\overline{X}_1 - \overline{X}_2)$
- 7.(a) The hourly wages of 144 workers of a large factory were recorded and the sample mean and standard deviation were found to be Rs.23.52 and Rs.6.71 respectively. Find a 99 % confidence interval for the mean wages of factory workers.
 - (b) Given $n_1 = 50$, $\sum X_1 = 490$, $\sum (X_1 \overline{X}_1)^2 = 900$ $n_2 = 40$, $\sum X_2 = 320$, $\sum (X_2 - \overline{X}_2)^2 = 720$ Test $H_0: \mu_1 = \mu_2$ $H_1: \mu_1 \neq \mu_2$ Use $\alpha = 0.05$
- 8.(a) Compute the regression coefficients for the following data: $n = 20 \qquad \sum y = 400 \qquad \sum y = 220$

$$\sum x^2 = 8800 \qquad \sum y^2 = 2620$$

\(\sum x y = 4300\)

(b) For a given set of data, we have $r = 0.5 \qquad \sum (x - \overline{x}) (y - \overline{y}) = 120$ $S_y = 8 \qquad \sum (x - \overline{x})^2 = 90$

Find the number of pair of values.

9.(a) Find the Association between Injection against typhoid and exemption from attack from the following contingency table:-

Attribute	Attacked	Not Attacked
Inoculated	528	25
Not inoculated	790	175

(b) Calculate 7 – days moving average for following table:-Week Sunday Monday Tuesday Wednesday Thursday Friday Saturday 24 30 48 I 50 54 55 62 II 28 52 41 42 50 41 42

Plot the given data and moving average on the same graph.

4

Pape	r Code	2017 (A) Roll No	
Num	4101	100	ART-II (12th CLASS)	
		ER-II (NEW SCHEM	ME) (SESSION 2015-2	2017)
TIMI	E ALLOWED: 20 1	Minutes OF	BJECTIVE M	AXIMUM MARKS: 17
think Cutting as giv	is correct, fill that ci ng or filling two or m en in objective type o	rcle in front of that questic nore circles will result in ze question paper and leave o	e question as A, B, C and D on number. Use marker or ro mark in that question. A thers blank. No credit will his sheet of OBJECTIVE F	pen to fill the circles. Attempt as many question be awarded in case
Q.No	.1			
(1)	In a Normal Distrib	oution, δ is always:-		
	(A) Negative numb	er (B) Zero	(C) Positive number	(D) Odd number
(2)	If $y = 5x + 10$ and	X is $N(10, 25)$, then n	nean of Y is:-	
	(A) 50	(B) 60	(C) 70	(D) 135
(3)	Standard normal pro	bability density function is	denoted by:-	Again (
	(A) $F(X)$	(B) $\mu(X)$	(C) ₹	(D) $\phi(Z)$
(4)	Population size is de	enoted by:-		
	(A) M	(B) N	(C) n	(D) m
(5)	If $\sum x = 18$, $N = 3$	3, then μ is:-	1865 Albert	10
	(A) 6	(B) 9	(C) 3	(D) 10
(6)	2.0 (C)	tailed information is known	5NG-601 (5)	
	(A) Units	(B) Designs	(C) Inaccuracies	(D) Census
(7)	A point estimator is			(=)
S2 .5%	(A) Estimate	(B) Value	(C) Parameter	(D) Statistic
(8)	Type – II error is de	enoted by:-		
	(A) ∞	(B) β	(C) 1- β	(D) 1 − ∞
(9)	A sample of size n	is called a small sample if		Control of the Contro
	(A) < 30	(B) ≥ 30	(C) = 30	(D) ≤ 30
(10)	Independent variable	e is also called:	14041 10002	
	(A) Regressor	(B) Regressand	(C) Predictand	(D) Explained
(11)	When two variables	are uncorrelated the value of	of 'r' is:-	•
	(A) -1	(B) 0	(C) +1	(D) +2
(12)	If $\sum y = 96$, $n = 8$,	, if $b = 0$ then 'a' is:-		
	(A) 10	(B) 11	(C) 12	(D) 13
(13)	In attributes, "Negat	tive class Frequency" can ne	ver be:-	
	(A) Ultimate	(B) Positive	(C) Negative	(D) Consistence
(14)	The two attributes as	re independent, if:-		
	(A) $Q = -1$	(B) $Q = 1$	(C) $Q = 0$	(D) $Q = 2$
(15)	Seasonal variations	are short term:-		
	(A) Analysis	(B) Indicators	(C) Components	(D) Movements
(16)	For best fitted line	$\sum (y - \hat{y})^2$ is:-		
	(A) Maximum	(B) Minimum	(C) Zero	(D) None of these
(17)	The unit of frequence		1000-1110 (1000-1110)	The second secon
	(A) Newton	(B) Joule	(C) Hertz	(D) Second

40(Obj)(★)-2017(A)-1500 (MULTAN)

N	nber: 4183	271, (.	.,	XI.
	A11		ART-II (12 th CLASS)	2017)
	TISTICS PAPER-I E ALLOWED: 20 Minu		ME) (SESSION 2015- BJECTIVE N	AXIMUM MARKS: 17
	: You have four choices for			
think	is correct, fill that circle i	n front of that question	on number. Use marker o	r pen to fill the circles.
	ng or filling two or more c en in objective type quest			Attempt as many questions
	BLES are not filled. Do n			
Q.No	0.1			
(1)	The two attributes are ind	ependent, if:-		
	(A) $Q = -1$	(B) $Q = 1$	(C) $Q = 0$	(D) $Q = 2$
(2)	Seasonal variations are sh	ort term:-		
	(A) Analysis	(B) Indicators	(C) Components	(D) Movements
(3)	For best fitted line $\sum (y)$	$-\hat{y})^2$ is:-		
	(A) Maximum	(B) Minimum	(C) Zero	(D) None of these
(4)	The unit of frequency is:-	8. 10.	083897-88323	0 Mile
	(A) Newton	(B) Joule	(C) Hertz	(D) Second
(5)	In a Normal Distribution	, δ is always:-		
	(A) Negative number	(B) Zero	(C) Positive number	(D) Odd number
(6)	If $y = 5x + 10$ and X	is $N(10, 25)$, then m	nean of Y is:-	
	(A) 50	(B) 60	(C) 70	(D) 135
(7)	Standard normal probabil	ity density function is	denoted bye-	Substitute a second
	(A) $F(X)$	(B) μ(X)	(C) 2	(D) $\phi(Z)$
(8)	Population size is denoted	Tby:-		
	(A) M	(B) N	(C) n	(D) m
(9)	If $\sum x = 18$, $N = 3$, then	n μ is:-		
	(A) 6	(B) 9	(C) 3	(D) 10
(10)	The collection of detailed	information is known	as:-	
	(A) Units	(B) Designs	(C) Inaccuracies	(D) Census
(11)	A point estimator is a sam	ple:-		
1000100.073	(A) Estimate	(B) Value	(C) Parameter	(D) Statistic
(12)	Type – II error is denoted	by:-		
	(A) ∝	(B) β	(C) $1-\beta$	(D) 1 − ∞
(13)	A sample of size n is call	ed a small sample if n	is:-	
	(A) < 30	(B) ≥ 30	(C) $= 30$	(D) ≤ 30
(14)	Independent variable is als	so called:-		
7 m	(A) Regressor	(B) Regressand	(C) Predictand	(D) Explained
(15)	When two variables are ur			
(16)	(A) -1	(B) 0	(C) +1	(D) + 2
(16)	If $\sum y = 96$, $n = 8$, if k		Va	
(17)	(A) 10	(B) 11	(C) 12	(D) 13
(17)	In attributes, "Negative cla (A) Ultimate			m a
	(i) omnate	(B) Positive	(C) Negative	(D) Consistence
			40(Obj)(***)-201	7(A)-1500 (MULTAN)

2017 (A) Roll No._____

Paper Code

Pape	r Code	2017	(A) Roll No	
Num	ber: 4185	INTERMEDIATE	PART-II (12th CLASS)	
-	A CONTRACT OF THE PARTY OF THE		ME) (SESSION 2015-2	017)
TIMI	E ALLOWED: 20 P	Minutes <u>O</u>	BJECTIVE MA	AXIMUM MARKS: 17
think Cutting as giv	is correct, fill that ci ng or filling two or m en in objective type o	rcle in front of that quest ore circles will result in z question paper and leave	the question as A, B, C and D. ion number. Use marker or the mark in that question. A others blank. No credit will this sheet of OBJECTIVE P	pen to fill the circles. ttempt as many question be awarded in case
Q.No	.1			
(1)	Type – II error is der	noted by:-		
	(A) ∝	(B) β	(C) $1 - \beta$	(D) 1 − ∝
(2)	A sample of size n	is called a small sample if	n is:-	
	(A) < 30	(B) ≥ 30	(C) $= 30$	(D) ≤ 30
(3)	Independent variable	e is also called:-		
	(A) Regressor	(B) Regressand	(C) Predictand	(D) Explained
(4)	When two variables	are uncorrelated the value	of 'r' is:-	
	(A) -1	(B) 0	(C) +1	(D) +2
(5)	If $\sum y = 96$, $n = 8$,	if $b = 0$ then 'a' is:-		
	(A) 10	(B) 11	(C) 12	(D) 13
(6)	In attributes, "Negat	ive class Frequency" can n	ever be:-	
	(A) Ultimate	(B) Positive	(C) Negative	(D) Consistence
(7)	The two attributes ar	re independent, if:-		
	(A) $Q = -1$	(B) $Q = 1$	(C) Q = 9	(D) $Q = 2$
(8)	Seasonal variations a	are short term:-		
	(A) Analysis	(B) Indicators	(C) Components	(D) Movements
(9)	For best fitted line	$\sum (y-\hat{y})^2$ is:		
	(A) Maximum	(B) Minimum	(C) Zero	(D) None of these
(10)	The unit of frequence	y is:-		
	(A) Newton	(B) Joule	(C) Hertz	(D) Second
(11)	In a Normal Distrib	ution. $\mathcal S$ is always:-		
	(A) Negative number	er (B) Zero	(C) Positive number	(D) Odd number
(12)	If $y = 5x + 10$ and	X is $N(10, 25)$, then r	mean of Y is:-	
	(A) 50	(B) 60	(C) 70	(D) 135
(13)	Standard normal pro	bability density function is	denoted by:-	
	(A) $F(X)$	(B) $\mu(X)$	(C) ₹	(D) $\phi(Z)$
(14)	Population size is de	noted by:-		
	(A) M	(B) N	(C) n	(D) m
(15)	If $\sum x = 18$, $N = 3$,	then μ is:-		
	(A) 6	(B) 9	(C) 3	(D) 10
(16)	The collection of det	ailed information is known	as:-	9709-427 LL 650
	(A) Units	(B) Designs	(C) Inaccuracies	(D) Census
(17)	A point estimator is a	a sample:-		
	(A) Estimate	(B) Value	(C) Parameter	(D) Statistic
		40(Obj)(★★★)-2017(A)-1500	(MULTAN)

Pape	er Code	2017 (A) Roll No.	
Num	ber: 4187	INTERMEDIATE P	ART-II (12th CLASS)	
TIMI Note think Cutti	is correct, fill that ci	Minutes OE ices for each objective type rcle in front of that question ore circles will result in ze	e question as A, B, C and D. on number. Use marker or oro mark in that question. A	AXIMUM MARKS: 17 The choice which you pen to fill the circles. ttempt as many question
			thers blank. No credit will his sheet of OBJECTIVE P	
Q.No	.1			
(1)	If $\sum x = 18$, $N = 3$, then μ is:-		
	(A) 6	(B) 9	(C) 3	(D) 10
(2)	The collection of de	tailed information is known	as:-	
	(A) Units	(B) Designs	(C) Inaccuracies	(D) Census
(3)	A point estimator is	a sample:-		5.75
	(A) Estimate	(B) Value	(C) Parameter	(D) Statistic
(4)	Type – II error is de	noted by:-		
	(A) ∝	(B) β	(C) 1 – β	(D) 1 − ∞
(5)	A sample of size n	is called a small sample if n	is:-	
	(A) < 30	(B) ≥ 30	(C) = 30	(D) ≤ 30
(6)	Independent variabl			728 - 54
	(A) Regressor	(B) Regressand	(C) Kredictand	(D) Explained
(7)		are uncorrelated the value of	And the second second	(b) Expanied
	(A) -1	(B) 0	(C)+1	(D) +2
(8)	If $\sum y = 96$, $n = 8$, if $b = 0$ then 'a' is:		(-)
	(A) 10	(B) 11	(C) 12	(D) 13
(9)	1300000000	tive class Frequency" can no		(D) 13
8.3	(A) Ultimate	(B) Positive	(C) Negative	(D) Consistence
(10)	The two attributes	233	(c) regative	(D) Consistence
N.T.T.W.	(A) $Q = -1$	(B) Q = 1	(C) $Q = 0$	(D) $Q = 2$
(11)	Seasonal variations		(0) 2 - 0	(b) $Q = 2$
(,	(A) Analysis	(B) Indicators	(C) Components	(D) Movements
(12)	For best fitted line	20042	(c) components	(D) Movements
(12)			(0) 7	122100 233
(13)	(A) Maximum	(B) Minimum	(C) Zero	(D) None of these
(13)	The unit of frequence (A) Newton	50751 ASS 1456	(O) II.	PARAMETER A
(14)		(B) Joule oution, δ is always:-	(C) Hertz	(D) Second
(14)	(A) Negative numb	330	(C) D:4:	(D) 0.11 1
(15)		er (B) Zero if X is $N(10, 25)$, then m	(C) Positive number	(D) Odd number
(13)				magazita yang paga
(16)	(A) 50 Standard normal pro	(B) 60	(C) 70	(D) 135
(10)		bability density function is (April 12 mil
(17)		(B) μ(X)	(C) ±	(D) $\phi(Z)$
(17)	Population size is de	NS _{1,000}	(0)	Was Mile south
	(A) M	(B) N	(C) n	(D) m
		40(Obj)(★7	★★)-2017(A)-1500 (N	IULTAN)

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Roll No:	

INTERMEDIATE PART-II (12th CLASS)

STATISTICS PAPER-II (OLD SCHEME) (SESSION 2012-2014)

MAXIMUM MARKS: 83 TIME ALLOWED: 3.10 Hours SUBJECIVE NOTE: - Write same question number and its part number in answer book, as given in the question paper. SECTION-I 2. $8 \times 2 = 16$ Attempt any eight parts. In a normal distribution $\mu = 5 \& \sigma^2 = 1$. Write down its equation. (i) Also find the value of maximum ordinate. (ii) The mean deviation of a normal distribution is 16. Find the approximate value of its standard deviation. (iii) For a standardized normal distribution, find the value of quartile deviation and mean deviation. (iv) In a normal distribution $\sigma^2 = 15$, then find the values of $\beta_1 \& \beta_2$. What are the parameters of the normal distribution? Which parameter controls the relative (v) flatness of the normal curve. (vi) Define an unbiased estimator. Differentiate between Estimator and Estimate. (vii) Differentiate between level of significance and type I error. (viii) (ix) What is meant by power of the test? (x) Under which circumstances, we may use (i) z - test (xi) Differentiate between Software and Hardware. (xii) What does D.V.D. stands for? What purpose can it serve? 3. $8 \times 2 = 16$ Attempt any eight parts. (i) Define Sampling Distribution. (ii) What do you understand by Standard Error? (iii) Express the term Parameter. (iv) Elaborate the term Probability Sampling. Enlist the properties of sampling distribution of sample means. (v) Given n = 5, p = 0.5. Find $\delta_{\hat{x}}^2$ (vi) What is meant by Regression? (vii) (viii) Define Scatter Diagram. (ix) Explain Regression Coefficial (x) What is meant by Negative Correlation? (xi) Given r = 0.8. Find S... (xii) Interpret the meaning of r = 0 & rAttempt any six parts. $6 \times 2 = 12$ (i) Define an Attribute. (ii) Distinguish between Association and -ve Association. Define a Contingency Table. (iii) (iv) What is meant by Independence of Attributes? What is the other name of Multiplicative model in time series? (v) Write down two examples of Irregular Variation. (vi) Define the Seasonal variation in a time series. (vii) (viii) Explain the purpose of time series. (ix) Describe the free hand curve method. SECTION-II NOTE: - Attempt any three questions. In a normal distribution the lower and upper quartiles are 15 and 25 respectively. Find mean, median, mode and standard deviation. 4 (b) Let $X \sim N(56, 100)$

6.(a) Given the following population 4, 8, 8, 12, 12.

(i) $P(X \ge 68)$

Find

(i) Take all possible samples of size "3" without replacement.

(ii) Prepare sampling distribution of means and verify the results

(i)
$$\mu_{\bar{X}} = \mu$$
 (ii) $\sigma_{\bar{X}} = \frac{\sigma}{\sqrt{n}} \cdot \sqrt{\frac{N-n}{N-1}}$

(ii) $P(42 \le x \le 52)$

(b) Consider the following results from two populations:-

$$N_1 = 6, n_1 = 3$$

$$N_2 = 5$$

$$n_2 = 2$$

$$\mu_1 = 4$$

$$\mu_2 = \frac{3}{2}$$

$$\sigma_1^2 = 5$$

$$\sigma_2^2 = \frac{9}{2}$$

Calculate

(i)
$$\mu_{\bar{x}_1 - \bar{x}_2}$$
 (ii) $\sigma_{\bar{x}_1 - \bar{x}_2}^2$

when sampling is done with replacement and without replacement.

7.(a) Find 95 % confidence interval for population mean from the following sample 54, 76, 98, 114, 136, 158, 179, 197, 218 and 236. Assume that population standard deviation is unknown.

4

(b) Two samples A and B detailed below were taken from normal population with standard deviation 4. Test whether the difference of Means is significant at $\alpha = .05$

4

			10.7			
В	9.3	10.4	10.4	11.9	12.2	12.7

8.(a) Determine the regression line Y on X by least square method from the following data.

Also estimate the value of Y for X = 30

4

(b) From the following data of variable X and Y. Find the value of correlation coefficient.

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9.(a) Given the following frequencies of positive classes. Find the ultimate frequencies.

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٠.	344			ıa	1.0

$$n = 1060$$

$$(A) = 490$$

$$(B) = 674$$

$$(AB) = 294$$

(b) Smooth the data by semi-average method.

4

Years	1988	1989	1990	1991	1992	1993	1994	1995
Values	115	120	116	113	122	120	127	132

SECPION-III (PRACTICAL)

10. NOTE: - Attempt any three parts.

 $3 \times 5 = 15$

(a) A random variable x has the following probability distribution.

x	4	5	6
f(x)	.3	.5	.2

(i) Find mean variance and standard deviation.

(ii) If a sample of size 16 is drawn with replacement from this population then find Mean and Standard deviation of sampling distribution of \overline{X} .

(b) Given two random samples of $n_1 = 11$ and $n_2 = 14$ from two independent populations.

Gave $\overline{X}_1 = 75$, $\overline{X}_2 = 60$, $\sum (X_1 - \overline{X}_1)^2 = 372.27$ and $\sum (X_2 - \overline{X}_2)^2 = 365.17$

Test the Hypothesis that both population means are equal at 5 % level of significance.

(c) Fit a least square line to the following data taking X as dependent variable.

10	1 16 00 10	MUSE D	deren	- 11111		10 10	110 111	119 000	ter terre
	X	1	3	4	6	8	9	11	14
	Y	1	2	4	4	5	7	8	9

(d) Find the value of Chi-square χ^2 to test the irradiation between attributes.

Attributes	A_1	A_2
B_1	500	160
В,	100	400

(e) Calculate 7 - days moving average for the following record of attendances.

Week	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	24	50	30	48	54	55	62
2	28	41	42	50	52	41	42

Pape	er Code	2017 (A)	Roll No	
Num	ber: 8181	INTERMEDIATE PART-I	I (12th CLASS)	
STA	TISTICS PAPI	ER-II (OLD SCHEME) (S	ESSION 2012-2014)	
	E ALLOWED: 20 1	Minutes OBJECT	IVE MAX	MUM MARKS: 17
think Cutting as giv	is correct, fill that cing or filling two or me ren in objective type of BLES are not filled.	ices for each objective type question rele in front of that question numbers or circles will result in zero mark question paper and leave others bloom to solve question on this sheet	oer. Use marker or pen k in that question. Atter ank. No credit will be a	to fill the circles. npt as many questions warded in case
(1)		approximately equal to:-		
	(A) 2.7183	(B) 2.6183	(C) 2.8173	(D) 3.1416
(2)	Total area under the	curve is:-		
	(A) 1	(B) < 1	(C) > 1	(D) None of these
(3)	In a normal distribu	ation $E(x-\mu)^2$ is:-		
	(A) Quartile deviati	ion (B) Standard deviation	(C) Variance	(D) None of these
(4)	Sample is a subset of	f:-	\$2.50 1	N/B
	(A) Population	(B) Data	(C) Set	(D) Distribution
(5)	The finite population	n correction factor is:-		/mmin 1,000
	(A) $\frac{n}{N}$	(B) $\frac{N}{n}$	(C) $\frac{N-n}{N}$	(D) $\sqrt{\frac{N-n}{N-1}}$
(6)		ion of a statistic is called:-	N = 1	V № −1
10 Th	(A) Sampling distri		(S) Sampling error	(D) Parameter
(7)	A large sample cont	ains more than:-		62 57
	(A) 5 values	(B) 10 values	(C) 20 values	(D) 30 values
(8)	Power of test is den	oted by:-		
	(A) α	(B) β	(C) 1 – α	(D) $1 - \beta$
(9)	The probability of ty	ype – I error is called		
	(A) α	(B) $1-\alpha$	(C) β	(D) $1 - \beta$
(10)	Simple linear regres	sion model contains:-		
	(A) One variable	(B) Two variables	(C) Three variables	(D) None of these
(11)	If $r_{xy} = -0.84$ then	n r _x is:-		
	(A) - 0.84	(B) 0.84	(C) 0.42	(D) None of these
(12)	Strength of linear re	elationship between variables is calle	ed:-	
	(A) Regression	(B) Causation	(C) Correlation	(D) Association
(13)	The parameters Chi	Square distribution is:-		
	(A) Degree freed	lom (B) Number of rows	(C) Number of colur	nns (D) None of these
(14)	If $(AB) > \frac{(A)(B)}{n}$	then association is:-		
	(A) Positive	(B) Negative	(C) Perfect	(D) None of these
(15)	Methods of secular	trend are:-		
	(A) 2	(B) 3	(C) 4	(D) 5
(16)	The graph of time s	eries is called:-		100 To
	(A) Histogram	(B) Historigram	(C) Trend	(D) Straight line
(17)	Display on the comp	puter screen is:-		
	(A) Soft copy	(B) Hard copy	(C) Computer copy	(D) None of these
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Number: 8183

2017 (A)

Roll No._____

INTERMEDIATE PART-II (12th CLASS)

STATIST	ICS P	APER-II	(OLD SCHEME)	(SESSION 2012-2014)

TIME ALLOWED: 20 Minutes

OBJECTIVE

MAXIMUM MARKS: 17

Note: You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled. Do not solve question on this sheet of OBJECTIVE PAPER. Q.No.1

- (1) Simple linear regression model contains:-
 - (A) One variable
- (B) Two variables
- (C) Three variables
- (D) None of these

- (2) If $r_{xy} = -0.84$ then r_{yx} is:-
 - (A) 0.84
- (B) 0.84

- (C) 0.42
- (D) None of these

- (3) Strength of linear relationship between variables is called:-
 - (A) Regression
- (B) Caution
- (C) Correlation
- (D) Association

- (4) The parameters of Chi Square distribution is:-
 - (A) Degree freedom
- (B) Number of rows
- (C) Number of columns (D) None of these
- (5) If $(AB) > \frac{(A)(B)}{n}$ then association is:-
 - (A) Positive
- (B) Negative
- (C) Perfect
- (D) None of these

- (6) Methods of secular trend are:-
 - (A) 2

(B) 3

- (0)
- (D) 5

- (7) The graph of time series is called:-
 - (A) Histogram
- (B) Historigram
- (C) Trend
- (D) Straight line

- (8) Display on the computer screen is:-
 - (A) Soft copy
- B) Hard copy
- (C) Computer copy
- (D) None of these

- (9) The value of "e" is approximately equal to:-
 - (A) 2.7183
- B) 2.6183
- (C) 2.8173
- (D) 3.1416

- (10) Total area under the curve is:
 - (A) 1

(B) < 1

- (C) > 1
- (D) None of these

- (11) In a normal distribution $E(x-\mu)^2$ is:-
 - (A) Quartile deviation
- (B) Standard deviation
- (C) Variance
- (D) None of these

- (12) Sample is a subset of:-
 - (A) Population
- (B) Data
- (C) Set
- (D) Distribution

- (13) The finite population correction factor is:-
 - (A) $\frac{n}{N}$

(B) $\frac{N}{n}$

- (C) $\frac{N-n}{N-1}$
- (D) $\sqrt{\frac{N-n}{N-1}}$

- (14) Probability distribution of a statistic is called:-
 - (A) Sampling distribution
- (B) Standard error
- (C) Sampling error
- (D) Parameter

- (15) A large sample contains more than:-
 - (A) 5 values
- (B) 10 values
- (C) 20 values
- (D) 30 values

- (16) Power of test is denoted by:-
 - (A) α

(B) B

- (C) 1α
- (D) 1β

- (17) The probability of type I error is called:-
 - (A) α

- (B) $1-\alpha$
- (C) β
- (D) 1β

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Pa	per Code	2017 (A)	Roll No	
-		NTERMEDIATE PART		4)
Not thin Cutt as gi BUE	ME ALLOWED: 20 Minus: You have four choices it is correct, fill that circle ting or filling two or more iven in objective type que BBLES are not filled. Do		TIVE MAX tion as A, B, C and D. T nber. Use marker or pork in that question. Att blank. No credit will be	XIMUM MARKS: 1' The choice which you en to fill the circles. empt as many question e awarded in case
Q.N (1)	A large sample contains	s more than:-		
	(A) 5 values	(B) 10 values	(C) 20 values	(D) 30 values
(2)	Power of test is denoted		(-)	(2) 20 141465
	(A) α	(B) β	(C) $1 - \alpha$	(D) $1 - \beta$
(3)	The probability of type	- I error is called:-	NEW E	(=) · P
	(A) α	(B) 1 – α	(C) β	(D) 1 – β
(4)	Simple linear regression		(0) p	(B) 1 - p
	(A) One variable	(B) Two variables	(C) Three wriables	(D) None of these
(5)	If $r_{xy} = -0.84$ then r_{y}	White and the property of the control of the contro	(C) Timee variables	(b) None of these
	(A) -0.84	(B) 0.84	(C) 0.42	(D) M
(6)	CONTROL SECTIONS	onship between variables is call		(D) None of these
	(A) Regression	(B) Caution	(C) Correlation	(D) Association
(7)	The parameters of Chi S		(C) Continue	(D) Association
	(A) Degree freedom	(B) Number of rows	(C) Number of colu	mns (D) None of these
(8)	If $(AB) > \frac{(A)(B)}{n}$			(2) Hole of these
	(A) Positive	(B) Negative	(C) Perfect	(D) None of these
(9)	Methods of secular trend	l are:-		10.00
	(A) 2	(B) 3	(C) 4	(D) 5
(10)	The graph of time series	s is called:-		
	(A) Histogram	(B) Historigram	(C) Trend	(D) Straight line
(11)	Display on the computer	screen is:-		
(10)	(A) Soft copy	(B) Hard copy	(C) Computer copy	(D) None of these
(12)	The value of " e " is app	roximately equal to:-		
10	(A) 2.7183	(B) 2.6183	(C) 2.8173	(D) 3.1416
13)	Total area under the curv			
	(A) 1	(B) < 1	(C) > 1	(D) None of these
14)	In a normal distribution	$E(x-\mu)^2$ is:-		
15)	(A) Quartile deviation Sample is a subset of:-	(B) Standard deviation	(C) Variance	(D) None of these
774	(A) Population	(R) Data	(0) 0	600 Minus
16)	The finite population corn	(B) Data	(C) Set	(D) Distribution
	(A) $\frac{n}{N}$	(B) $\frac{N}{n}$	(C) $\frac{N-n}{N-1}$	(D) $\sqrt{\frac{N-n}{N-1}}$
17)	Probability distribution of	n f a statistic is called:-	N-1	$\sqrt{N-1}$
	(A) Sampling distribution		(C) Sampling error	(D) Paramotor

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Sample is a subset of:-

(B) Data

(A) Population

(D) Distribution

(C) Set

BOARD OF INTERMEDIATE AND SECONDARY EDUCATION,

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Q. Nos.	Paper Code	Paper Code	Paper Code	Paper Code	Q. Nos.	Paper Code	Paper Code	Paper Code	Paper Code
105.	4181	4183	4185	4187		8181	8183	8182	8187
1.	c	(B	A	1.	A	B	0	С
2.	B	D	Α	D	2.	A	A	0	A
3.	و	В	Α	D	3.	C	C	A	0
4.	В	۷	В	B	4.	A	A	B	0
5.	Α	C	c	A	5.	C	A	A	A
6.	D	В	Correct	A	6.	A	C	C	B
7.	D	D	C	B	7.	0	B	A	A
8.	В	В	D	c	8.	0	A	A	C
9.	Α	A	В	Corred	9.	A	A	C	A
10.	Α	D	c	C	10.	B	A	B	A
11.	В	D	C	D	11.	A	C	A	C
12.	C	B	B	B	12.	C	A	A	B
13.	Correct	Α	D	C	13.	A	C	A	A
14.	C	A	8	7	14.	A	A	С	A
15.	0	В	A	В	15.	C	0	A	A
16.	B	C	D	D	16.	B	D	С	C
17.	4	All	D	В	17.	A	A	A	A
18.					18.				
19.					19.				

سرفيفيكيك بابت تفيح سواليد يرجد مار الك Key

20.

بم نے منمون مشمار ما ہے پر چہ میں کو الدیر جان کے دومروش کا معان کا الدید کا متحان 2017 کا موالد پر چان کے دومروش کی کوئی (Subjective & Objevtive) کو بنظر عمین چیک کرلیا ہے یہ پر چہ سلیس کے بین مطابق Set کیا گیا ہے۔ اس موالیہ پر چہ میں کی حتم کی کوئی فاطی نہ ہے۔ ہم نے موالیہ پر چہ کا اور واور انگریز Version بھی چیک کرلیا ہے یہ Version آپس میں مطابقت دکھتے ہیں اور سلیس (Syllabus) کے مطابق بھی ہیں۔ نیز اس پر چہ کی اور کہ دو ہدایا ہے کہ یہ بھی کا درست بنائی گئی ہے۔ اس میں بھی کی کوشم کی کوئی فلطی نہ ہے۔ مزید یہ کہ بہت ہیں اور کردو ہدایا ہے۔ وصول کر کے ان کا بغور مطالعہ کرلیا ہے اور ان کی روشن میں الک بنائی ہے۔

20.