2017 (A)

Roll No:

INTERMEDIATE PART-I (11th CLASS)

STATISTICS PAPER-I TIME ALLOWED: 2.40 Hours

(NEW SCHEME) (SESSION 2015-2017) SUBJECTIVE MAXIM

MAXIMUM MARKS: 68

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

SECTION-I

Attempt any eight parts.

 $8 \times 2 = 16$

- Define STATISTICS.
- (ii) What is Discrete Variable? Give any example.
- (iii) Give any two qualities of a good average.
- (iv) What do you mean by Harmonic Mean?
- (v) Sum of deviations of 10 values from X = 50 is 500, what will be the value of Arithmetic Mean?
- (vi) Calculate Geometric Mean for the values 16, 1, 4.
- (vii) What will be the mode if Mean = 30 and Median = 40?
- (viii) Define Index Number.
- (ix) Write name of base year weighted index number.
- (x) What do you mean by Consumer Price Index Number?
- (xi) If $\sum p_n q_n = 294$ and $\sum p_n q_n = 269$, find current year weighted index number.
- (xii) If $\Sigma IW = 16500$ and $\Sigma p_o q_o = 110$, then find consumer price index number by Family Budget Method.

Attempt any eight parts.

 $8 \times 2 = 16$

- (i) What is meant by Frequency Polygon?
- (ii) Distinguish between Histogram and Historigram.
- (iii) Define Quartile Deviation and how it is calculated?
- (iv) Write down only various absolute measures of Dispersion.
- (v) Distinguish between Positive and Negative Skewness.
- (vi) Explain Moments about Mean.
- (vii) Given Mean = 50, Median = 48 and coefficient of skewness = 1. Find the value of Variance.
- (viii) Given Mean = 50, Median = 48 and standard deviation = 6. Find Karl Pearson's Coefficient of skewness.
- (ix) What is meant by Random Experiment?
- (x) Explain the concept of dependent events.
- (xi) Suppose $P(A) = \frac{1}{4}$, $P(B) = \frac{1}{3}$ and $P(A \cup B) = \frac{1}{2}$. Determine $P(A \cap B)$.
- (xii) If P(A) = 0.2, P(B) = 0.4 and P(A/B) = 0.375. Find P(A and B).

Attempt any six parts.

 $6 \times 2 = 12$

- (i) How can random numbers be generated?
- (ii) Write two properties of Expectation.
- (iii) Define Probability Distribution.
- (iv) If E(x) = 5, find E(-3x + 2)
- (v) If E(x) = 3 and $E(x^2) = 12$, then find variance of x.
- (vi) Define Binomial Probability Distribution.
- (vii) Write two properties of Hypergeometric Experiment.
- (viii) In a binomial distribution n = 10 and p = 0.6. Find Mean and Variance of the Distribution.
- (ix) Given N = 10, k = 5 and n = 3. Find P(x < 1).

SECTION-II

NOTE: -	Attempt	any three	questions.
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5.(a) Compute G.M of the d	ata.
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Age (years)	11-20	21 - 30	31-40	41 - 50	51 - 60	61 - 70
f	12	14	26	35	23	5

The deviations from X = 22.5 of 10 different values of X axe -12, -8.5, 3.0, 0, 2.5, (b) 6.6, 9.2, 1.6, 0.5 and 0.4. Find the lower and upper quartiles of variable X.

Find M.D from the following Data:-6.(a)

Group	2-4	4-6	6-8	8-10	10 - 12
Frequency	3	5	6	7	3

(b) Lower and upper quartiles of a distribution are 142.36 and 167.73 respectively, While median is 153.50. find coefficient of skewness.

Compute Chain Index Numbers for the following data taking 1997 as base year:-7.(a)

Years	1997	1998	1999	2000	2001	2002	2003
Prices	180	185	194	200	204	218	220

Three coins are tossed. What is the probability of getting? (b)

(i) exactly 2 heads

(ii) at least 2 heads

Given E(X) = 5, $E(X^2) = 36$. Find the Mean and Variance of 2x - 5. 8.(a)

If it rains, a rain coat dealer can earn Rs.500 per day. If it is fair he can lose Rs.100 per day. (b) What is his expectation if the probability of rain is 0.4?

Workers have 20% chances of suffering from an occupational disease, what is 9.(a) probability that out of 6 workers (i) Exactly 2 will suffer from the disease (ii) At least 2 will suffer from the disease?

4

A committee of size 5 is selected at random from 3 women and 5 men. (b) Show that expected number of women is $\frac{nk}{N}$.

39-2017(A)-2000 (MULTAN)

Paper	Code	2017 (4)	D-II	N-
Numb	er: 2181	INTERMEDIATE PA	Roll RT-I (11 th CLASS)	No
Note: think Cuttir as give	is correct, fill that ci ng or filling two or n on in objective type	Minutes OB. oices for each objective type oircle in front of that question	n number. Use marke o mark in that question hers blank. No credit	MAXIMUM MARKS: 17 and D. The choice which you are or pen to fill the circles. On. Attempt as many questions will be awarded in case
Q.No.	i			
(1)	The data in their o	riginal form is called:-		
	(A) Secondary Dat	a (B) Primary Data	(C) Unordered Data	(D) None of these
(2)	The frequency of a	class divided by total frequer	ncy is called:-	
	(A) Class Frequence	cy (B) Total Frequency	(C) Relative Frequen	ncy (D) Cumulative Frequency
(3)	Graph of a Symme	trical Distribution is:-		
	(A) U – shaped	(B) Bell shaped	(C) J-shaped	(D) Bar shapes
(4)		viations of the values is least	when deviations ate tak	ken from:-
240	(A) Mean	(B) Median	(C) Mode	(D) H.M
(5)		and $\sum (X - 18) = 0$ then me		(B) 25 (C) 18 (D) 10
(6)	If the values are -	2, -3, -5, -10 then range is:	- (A) -12 (B) 12 (C) 8 (D) -8
(7)	The second mome	nt about Mean is equal to:-		
	(A) Zero	(B) Mean	(C) Variance	(D) Standard Deviation
(8)	In a Symmetrical D	distribution, $\mu_{\scriptscriptstyle 3}$ is:-		
	(A) Zero	(B) One	(C) Three	(D) Four
(9)	Base year weighted	index numbers are:-		
	(A) Laspeyre's	(B) Paasche's	(C) Fisher	(D) Marshall-Edgeworth
(10)	Fisher Index Numb	er is written as:-		
	(A) $\sqrt{\frac{L}{P}}$	(B) $\sqrt{\frac{P}{L}}$	(C) $\sqrt{L \times P}$	(D) None of these
(11)	An event that conta	iins more than one outcome is	called:-	
	(A) Simple Event	10.000000 (Tester State 1 ft an Albanda (Tester State 1 ft a	t (C) Impossible Event	
(12)	P(A) = 0.4, P(A) = 0.4	(B) = 0.3, If A and B are in	nutually exclusive even	ts, then $P(A \cup B)$ is:-
	(A) 0.4	(B) 0.3	(C) 0.7	(D) 1.2
(13)	The life time of a lig	ght bulb is:-		
5220998	(A) Discrete r.v	(B) Continuous r.v		(D) None of these
(14)		lom variable, then $E(C) = $ _	×	
	(A) Zero		(C) (C,	(D) n P
(15)		ere 'a' and 'b' are constant,		
	(A) $a Var(X)$	(B) $a^2 Var(X)$	(C) Var(X)	(D) $Var(X) + a$
(16)		bution, relationship between r	mean and variance is:-	
	(A) Mean = Varianc	TO ACCUPATION OF THE PROPERTY OF	(C) Mean < Variance	(D) None of these
(17)		xperiment, the trials are:-		
	(A) Dependent	(B) Independent	(C) Both A and B	(D) None of these
			39(Obj)(2)-2017(A)	-2000 (MIII TAN)

Paper	Code	2017 (A	D II	N1
Numb	er: 2183	INTERMEDIATE PA	Roll RT-I (11 th CLASS)	No
Note: think i Cuttin as give	s correct, fill that ci g or filling two or m n in objective type (Minutes OB ices for each objective type rele in front of that questio	n number. Use marke ro mark in that questic hers blank. No credit	MAXIMUM MARKS: 17 ad D. The choice which you or or pen to fill the circles. on. Attempt as many questions will be awarded in case
Q.No.1	E			
(1)	If $y = ax + b$, wh	nere 'a' and 'h' are constan	$t, Var(Y) = \underline{\hspace{1cm}}$	
	(A) $a Var(X)$	(B) $a^2 Var(X)$	(C) Var(X)	(D) $Var(X) + a$
(2)	For a binomial dist	ribution, relationship between		200-200 A 11 21 NOTE 1200-1200-1200
	(A) Mean = Varian		ce (C) Mean < Variance	
(3)	In hypergeometric	experiment, the trials are:-		
	(A) Dependent	(B) Independent	(C) Both A and B	(D) None of these
(4)	The data in their or	riginal form is called:-		
	(A) Secondary Data	a (B) Primary Data	(C) Unordered Data	(D) None of these
(5)	The frequency of a	class divided by total frequen		
	(A) Class Frequenc	y (B) Total Frequency	y (C) Relative Frequer	ncy (D) Cumulative Frequency
(6)		rical Distribution is:-		
	(A) U – shaped	(B) Bell shaped		
(7)		viations of the values is least	when deviations are tak	en from:-
	(A) Mean	(B) Median	(C) Mode	(D) H.M
(8)		and $\Sigma(X-18)=0$ then me		
(9)	If the values are -2	2, -3, -5, -10 then range is:	- (A) -12 (B)) 12 (C) 8 (D) -8
(10)	The second mome	ent about Mean is equal to:-		
	(A) Zero	(B) Mean	(C) Variance	(D) Standard Deviation
(11)	In a Symmetrical D	distribution, μ_3 is:-		
	(A) Zero	(B) One	(C) Three	(D) Four
(12)	Base year weighted	index numbers are:-		
	(A) Laspeyre's	(B) Paasche's	(C) Fisher	(D) Marshall-Edgeworth
(13)	Fisher Index Number	er is written as:-		
	(A) $\sqrt{\frac{L}{P}}$	(B) $\sqrt{\frac{P}{L}}$	(C) $\sqrt{L \times P}$	(D) None of these
(14)	An event that contain	ins more than one outcome is	called:-	
	(A) Simple Event	(B) Compound Even	t (C) Impossible Event	(D) None of these
(15)	P(A) = 0.4, P(B)	0 = 0.3, If A and B are m	utually exclusive events	s, then $P(A \cup B)$ is:-
	(A) 0.4	(B) 0.3	(C) 0.7	(D) 1.2
(16)	The life time of a light	ht bulb is:-		nite (# 11 - 2012)
	A) Discrete r.v		(C) Constant	(D) None of these
		om variable, then $E(C) = $ _	***************************************	
	(A) Zero	(B) 1	(C) 'C'	(D) n P
			39(Obj)(12-12)-2017	(A)-2000 (MULTAN)

Paper	Code			
~~~	2105	2017 (A) INTERMEDIATE PA	Rol	l No
Numbe	er: 2103	INTERMEDIATE PA	R1-1 (11" CLAS:	5)
TIME Note: think i Cuttin	is correct, fill that c g or filling two or i	Minutes OB.  oices for each objective type of the circle in front of that question	number. Use mark o mark in that quest	MAXIMUM MARKS: 17 and D. The choice which you ser or pen to fill the circles. ion. Attempt as many questions
		Do not solve question on th		
Q.No.1	L			
(1)	In a Symmetrical	Distribution, $\mu_3$ is:-		
	(A) Zero	(B) One	(C) Three	(D) Four
(2)	Base year weighte	ed index numbers are:-		
	(A) Laspeyre's	(B) Paasche's	(C) Fisher	(D) Marshall-Edgeworth
(3)	Fisher Index Num	ber is written as:-		
	(A) $\sqrt{\frac{L}{P}}$	(B) $\sqrt{\frac{P}{L}}$	(C) $\sqrt{L \times P}$	(D) None of these
(4)	An event that con	tains more than one outcome is	s called:-	
	(A) Simple Event	(B) Compound Ever	nt (C) Impossible Eve	ent (D) None of these
(5)	P(A) = 0.4, P(	(B) = 0.3, If $(A)$ and $(B)$ are n	nutually exclusive eve	ents, then $P(A \cup B)$ is:-
	(A) 0.4	(B) 0.3	(C) 0.7	(D) 1.2
(6)	The life time of a	light bulb is:-		
	(A) Discrete r.v	(B) Continuous r.v		(D) None of these
(7)	If 'C' is a non-rai	ndom variable, then $E(C) = $		
	(A) Zero	(B) 1	(C) ,C,	(D) n P
(8)	If $y = ax + b$ , w	here 'a' and 'b' are constant,	Var(Y) =	
	(A) $a Var(X)$	(B) $a^2 Var(X)$	(C) $Var(X)$	(D) $Var(X) + a$
(9)	For a binomial dist	tribution, relationship between	mean and variance is	
	(A) Mean = Variar	nce (B) Mean > Variance	e (C) Mean < Varian	ce (D) None of these
(10)	In hypergeometric	experiment, the trials are:-		
	(A) Dependent	(B) Independent	(C) Both A and B	(D) None of these
(11)	The data in their or	riginal form is called:-		
	(A) Secondary Dat	The second of th		(D) None of these
(12)	The frequency of a	class divided by total frequenc		
022-220	(A) Class Frequenc		(C) Relative Freque	ncy (D) Cumulative Frequency
(13)	*	trical Distribution is:-		
(1.4)	(A) U – shaped	(B) Bell shaped	(C) J-shaped	(D) Bar shapes
(14)		eviations of the values is least v		ken from:-
(15)	(A) Mean $\Sigma (V = 20) = 25$	(B) Median	(C) Mode	(D) H.M
(15)		and $\sum (X - 18) = 0$ then me		
(16)		2, -3, -5, -10 then range is:	(A) -12 (B)	12 (C) 8 (D) -8
(17)		nt about Mean is equal to:-	April 1991 - September 1991	
	(A) Zero	(B) Mean	(C) Variance	(D) Standard Deviation

Paper	Code	2017 (4)	D	II N
Numb	er: 2187	INTERMEDIATE PA		Il No
STAT TIME Note: think Cutting	FISTICS PAPE E ALLOWED: 20 E You have four cho is correct, fill that ci ag or filling two or a en in objective type	R-I (NEW SCHEMI Minutes <u>OB</u> pices for each objective type of ircle in front of that question	E) (SESSION  IECTIVE  question as A, B, C  number. Use mar  o mark in that ques  ners blank. No cred	2015-2017)  MAXIMUM MARKS: 17 and D. The choice which you ker or pen to fill the circles. tion. Attempt as many questions lit will be awarded in case
Q.No.		20 Lot sort e question on the	s succe of Obsect	IVETACEK.
(1)	$\sum (X - 20) = 25$	and $\sum (X - 18) = 0$ then me	ean is:- (A) Zero	(B) 25 (C) 18 (D) 10
(2)		2, -3, -5, -10 then range is:		.50 .50
(3)		ent about Mean is equal to:-		(5) 0 (5)
0000	(A) Zero	(B) Mean	(C) Variance	(D) Standard Deviation
(4)	In a Symmetrical I	Distribution, $\mu_3$ is:-	,-,	(D) Standard Deviation
	(A) Zero	(B) One	(C) Three	(D) Four
(5)		index numbers are:-	(C) Time	(D) Four
	(A) Laspeyre's	(B) Paasche's	(C) Fisher	(D) Marshall-Edgeworth
(6)	Fisher Index Numb	March 46 - March 2012 Sept 100 Control	10 C	(D) Walshall-Edgeworth
	(A) $\sqrt{\frac{L}{P}}$	(B) $\sqrt{\frac{P}{L}}$	(C) $\sqrt{L \times P}$	(D) None of these
(7)	An event that contr	ains more than one outcome is	called:-	
	(A) Simple Event	(B) Compound Even	at (C) Impossible Ev	ent (D) None of these
(8)	P(A) = 0.4, $P(B)$	B(B) = 0.3, If $A$ and $B$ are m		
	(A) 0.4	(B) 0.3	(C) 0.7	(D) 1.2
(9)	The life time of a li	ght bulb is:-		
	(A) Discrete r.v	(B) Continuous r.v	(C) Constant	(D) None of these
(10)	If 'C' is a non-ran	adom variable, then $E(C) = $		
	(A) Zero	(B) 1	(C) ,C,	(D) n P
(11)	If $y = ax + b$ , wh	nere 'a' and 'b' are constant,	Var(Y) =	
	(A) $a Var(X)$	(B) $a^2 Var(X)$	(C) Var(X)	(D) $Var(X) + a$
(12)	For a binomial dist	ribution, relationship between		
	(A) Mean = Variance			
(13)	In hypergeometric	experiment, the trials are:-		(-) 41 11000
	(A) Dependent	(B) Independent	(C) Both A and B	(D) None of these
(14)	The data in their ori	ginal form is called:-		
	(A) Secondary Data			(D) None of these
(15)		class divided by total frequenc		
V. 9% Ave-	(A) Class Frequency		(C) Relative Freque	ency (D) Cumulative Frequency
(16)		rical Distribution is:-		
(15	(A) U – shaped	(B) Bell shaped		
(17)		iations of the values is least w		ken from:-
	(A) Mean	(B) Median	(C) Mode	(D) H.M

2017 (A)

Roll No:

# INTERMEDIATE PART-I (11th CLASS)

# STATISTICS PAPER-I (OLD SCHEME) (SESSION 2012-2014)

TIME ALLOWED: 3.10 Hours

SUBJECTIVE

MAXIMUM MARKS: 83

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

#### SECTION-I

Attempt any eight parts.

 $8 \times 2 = 16$ 

- Define Statistics in Singular Sense.
- (ii) Differentiate between Population and Sample.
- (iii) Define Geometric Mean (G.M).
- (iv) Highlight some demerits of Mode.
- (v) If for 10 observations  $\sum (x-23) = -17$  find the value of A.M.
- (vi) Average of 5 observations is 70. The first two observations are 50 and 70 and the last two observations are 60 and 80. Find middle value.
- (vii) Find Median of 0, -3, -5, 2, 3
- (viii) Define Laspeyres Index.
- (ix) Define Paasches Index.
- (x) Define Fisher Ideal Index.
- (xi) Which average is the most useful average to be used for averaging the index numbers?
- (xii) Define Fixed base Method.

## Attempt any eight parts.

 $8 \times 2 = 16$ 

- (i) What is Classification?
- (ii) Define the term Ogive.
- (iii) Define Range and Coefficient of Range.
- (iv) Define the Standard Deviation.
- (v) Write a short note on Coefficient of Variation.
- (vi) The Mean of 200 items is 48 and their standard deviation is 3. Find the sum of squares of all items.
- (vii) The first four moments about mean of a distribution are 0, 4, 6 and 48. Find  $b_2$ .
- (viii) Given Mean = 100, Mode = 95 and Standard Deviation = 10. Find Coefficient of Skewness.
- (ix) Write a short note on Sample Space.
- (x) Define Venn diagram.
- (xi) A pair dice is rolled. What is the probability of getting same number on both faces?
- (xii) Write down the statement of Addition Law of Probability for two not mutually exclusive events.

#### Attempt any six parts.

 $6 \times 2 = 12$ 

- Define a Random Variable.
- (ii) What is a Discrete Probability Distribution?
- (iii) Define Mathematical expectation of a Random Variable X.
- (iv) Given that E(x) = 20 and CV = 17%. Find Var(x).
- (v) What is Distribution Function?
- (vi) Define Binomial Experiment.
- (vii) If  $p = \frac{1}{3}$ , n = 6, then find Mean and Variance of Binomial Probability Distribution.
- (viii) Write down properties of Hyper-geometric experiment.
- (ix) Find Mean of Hyper-geometric Probability Distribution if N = 12, n = 4, k = 5

## SECTION-II

NOTE: - Attempt any three questions.

5.(a) Compute Mode of the Data.

Hourly wages	4-6	6-8	8-10	10-12	12 - 14	14 - 16
No. of employees	13	111	182	105	19	7

(b) Find two numbers whose Mean is 9 and Geometric Mean is 7.2.

4

6.(a) Find the Coefficient of Variation.

x	10	11	12	13	14	15
f	1	4	9	12	5	4

(b) The first three moments of a distribution about the value 2 of the variable are 1, 16 and -40. Show that the Mean is 3, the variance is 15 and  $m_3$  is -86.

4

7.(a) Calculate Fisher's Ideal Index Number for the year 2010 taking 2005 as base

from the following data:-

	Pr	ice	Quantity	
Commodity	2005	2010	2005	2010
A	70	75	300	310
В	72	80	240	275
C	25	32	132	148
D	60	85	280	360

(b) What is the probability of throwing either "sum 7" or "Sum more than 10" with two dice?4

8.(a) A discrete probability distribution of a random variable 'X' is given in the following table:

-	4

	1	2
3/	15/	10/
	3/20	3/20 15/20

Find Mean and Variance of x.

(b) A continuous random variable 'X' has the following density function.

$$f(x) = ax + 3; 2 \le x \le 8 \text{ find } P(3 < x < 5)$$

4

9.(a) If n = 4 and  $p = \frac{3}{4}$ ; find complete binomial probability distribution.

4

(b) A committee of size 3 is selected from 4 men and 2 women, without replacement. Find Probability Distribution of women on the committee.

· A

### SECTION-III (PRACTICAL)

10. Attempt any three parts.

 $3 \times 5 = 15$ 

(A) Find Median and Mode of the following data:-

Classes	0-5	5-10	10 - 15	15 - 20	20 - 25
f	10	14	19	17	8

(B) Find coefficient of variation from the following:-

C-1	2-4	5 - 7	8 - 10	11-13	14 - 16
f	8	12	17	10	5

(C) Construct Fisher Ideal Index Number from the following data:-

Commodity	$p_0$	$q_0$	$p_1$	$q_1$
A	64	270	75	276
В	40	124	45	118
С	18	130	21	121

(D)  $f(X) = CX \ 0 \le X \le 2$  is a probability density function.

Find value of C and 
$$P(X < 1)$$
,  $P\left(\frac{1}{2} < X < \frac{3}{2}\right)$ 

(E) Write complete hyper-geometric distribution for N = 10, n = 3, k = 3, X = 0, 1, 2, 3

, , , , , , , , , , , , , , , , , , ,	6.1	ı <b>2</b> (	017 (A)	Roll No.
Paper			(2) (C)	heric versiones ( Associa
Numb	er: 6181	INTERMEDIA	TE PART-I (11th )	CLASS)
Note: think in Cutting as give BUBB Q.No.	is correct, fill that c ig or filling two or r en in objective type LES are not filled. I	Minutes  oices for each objective  ircle in front of that of  more circles will result  question paper and l  Do not solve question	question number. Un lt in zero mark in the eave others blank. N	MAXIMUM MARKS: 17 A, B, C and D. The choice which you se marker or pen to fill the circles. at question. Attempt as many questions to credit will be awarded in case OBJECTIVE PAPER.
(1)	In the plural sense	e, Statistics means:-		
5,79855	(A) Methods		a (C) Sample values	
(2)		ranging data into rows		
		tribution (B) Classifi	cation (C) Tabulation	n (D) Array
(3)		attributes is called:-		
721405		ta (B) Quantitative	N 52, 5800 - C.110000	e data (D) Grouped data
(4)		on is symmetrical and	has one mode, the hig	thest point on the curve is called the:-
122.5	(A) Mode	(B) Median	(C) Mean	(D) All of these
(5)		ep in calculating the M		
		o middle values of the		(B) Array the data
145		relative weights of the		of importance (D) None of these
(6)		measure of dispersion		
<b>(5)</b>				riance (D) All of these
(7)				ns are taken from the:-
(0)	(A) Mean	(B) Median	(C) Mode	(D) All of these
(8)	If $S.D.(x) = 5$ , th	nen $S.D.\left(\frac{2x+5}{2}\right)$ is (B) 10	XIII	
	(A) 5	(B) 10	(C) 15	(D) 7.5
(9)	If all the values con	nsidered in calculating	an index are of equal	importance, the index is:-
	(A) Weighted		(C) Un-weighted	(D) None of these
(10)	The weights used i (A) Percentage of t	n a price index are:- total price (B) Quant	ities (C) Average o	f prices (D) None of these
(11)	The probability of	drawing a king of space	les from a pack of 52	cards is:-
	(A) $\frac{1}{4}$	(B) $\frac{1}{13}$	(C) $\frac{1}{26}$	(D) $\frac{1}{52}$
(12)				two events are said to be:-
	(A) Dependent	(B) Independent		sive (D) Both B and C
(13)	Random numbers of	can be generated:-		
	(A) Manually	(B) Mechanically	(C) Both A and B	(D) None of these
(14)	If the random varia then 'X' assumes t	ble $X'$ denotes the mathematical here.	umber of heads when	three distinct coins are tossed,
	(A) 0, 1, 2, 3	(B) 1, 3, 3, 1	(C) 1, 2, 3	(D) None of these
(15)		he binomial distribution		
		(B) $x$ and $p$		(D) $x$ , $n$ and $p$
(16)		e binomial distribution		1
				riance (D) Mean = S.D.
(17)		distribution has		S. C
	(A) 2	(B) 3	(C) 1	(D) 4

(C) 1 (D) 4 39(Obj)(☎)-2017(A)-

(MULTAN)

(2)					
Paper	Code			17 (A)	Roll No
Numbe	er:	6183	INTERMEDIAT	E PART-I (11 th C	LASS)
Note: think is Cutting as give	ALLO You be seen file or file to the seen file of the see	et, fill that e ling two or n ejective type e not filled.	Minutes  pices for each objective  ircle in front of that quere circles will result  question paper and le  Do not solve question	uestion number. Use in zero mark in that ave others blank. No 1 6on this sheet of OF	MAXIMUM MARKS: 17 B, C and D. The choice which you marker or pen to fill the circles. question. Attempt as many questions credit will be awarded in case BJECTIVE PAPER.
(1)		random varid 'X' assumes		imber of heads when t	hree distinct coins are tossed,
	(A) 0	, 1, 2, 3	(B) 1, 3, 3, 1	(C) 1, 2, 3	(D) None of these
(2)	The p	arameters of	the binomial distribution	on $b(x; n, p)$ are:-	
	(A) .	x and n	(B) $x$ and $p$	(C) $n$ and $p$	(D) $x$ , $n$ and $p$
(3)		is true for th	ne binomial distribution	l.	E)
	(A) M	Iean > Varia	nce (B) Mean < Varia	nce (C) Mean = Var	riance (D) Mean = S.D.
(4)			ic distribution has		
	(A)	2	(B) 3	(C) 1	(D) 4
(5)	In the	e plural sense	e, Statistics means:-	N. PAGES	
			(B) Numerical Data	U. (1952) AW	(D) Population values
(6)	The p	rocess of arra	anging data into rows a	nd columns is called:-	
	(A) F	requency dist	ribution (B) Classifica	ation (C) Tabulation	(D) Array
(7)	Data	classified by	attributes is called:-		
			ta (B) Quantitative da	THE PARTY NAMED AND ADDRESS.	data (D) Grouped data
(8)	When	a distributio	n is symmetrical and ha	as one mode, the higher	st point on the curve is called the:-
	(A) N		(B) Median	(C) Mean	(D) All of these
(9)			ep in calculating the Me		
			o middle values of the		(B) Array the data
2105	(C) D		relative weights of the		importance (D) None of these
(10)	/ 4 ) 54		measure of dispersion.		
(11)			ation (B) Variance (		
(11)	(A) N		te deviations is a minim		
(12)			(B) Median $(2x+5)$ .	(C) Mode	(D) All of these
(12)	11 5		then $S.D.\left(\frac{2x+5}{2}\right)$ is		
(12)	(A) 5		(B) 10	(C) 15	(D) 7.5
(13)					importance, the index is:-
(14)	Colonia.	eighted	(B) Simple	(C) Un-weighted	(D) None of these
(14)			n a price index are:- otal price (B) Quantit	ies (C) Average of p	prices (D) None of these
			drawing a king of spade	•	ards is:-
	(A) $\frac{1}{4}$		(B) $\frac{1}{13}$	(C) $\frac{1}{26}$	(D) $\frac{1}{52}$
(16)	If one	event is une	ffected by the outcome	of another event, the t	wo events are said to be:-
		ependent	(B) Independent	(C) Mutually exclusi	ve (D) Both B and C
(17)			an be generated:-		
	(A) M	anually	(B) Mechanically	(C) Both A and B	(D) None of these

39(Obi)(\$\$\frac{1}{2}\$)-2017(A)- 240 (MULTAN)

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Pal	per	Cod	e

2017 (A) Roll No._

# 6185 INTERMEDIATE PART-I (11th CLASS)

Numb	er: U1	.00				
STAT	ISTICS	PAPE	R-I (OLD SC	HEME) (SESS	SION 2012-2014)	
	ALLOW			<b>OBJECTIVE</b>		UM MARKS: 17
Note:	You have	four che	oices for each objective	ve type question as	A, B, C and D. The c	hoice which you
Cuttin	s correct, fi g or filling t	ll that c	ircle in front of that nore circles will resu	question number.	Use marker or pen to hat question. Attempt	fill the circles.
as give	n in objecti	ve type	question paper and l	eave others blank.	No credit will be awa	rded in case
Q.No.1	LES are no	t filled.	Do not solve question	on 6on this sheet of	OBJECTIVE PAPER	ξ.
(1)		f absolu	te deviations is a mini	mum if these deviati	ions are taken from the	t-
	(A) Mean	i.	(B) Median	(C) Mode	(D) All of these	
(2)	If $S.D.(x)$	) = 5 , tl	then $S.D.\left(\frac{2x+5}{2}\right)$ is	S:-		
	(A) 5		(B) 10	(C) 15	(D) 7.5	
(3)	If all the v	alues co	nsidered in calculating	g an index are of equ	al importance, the inde	ex is:-
	(A) Weight	ted	(B) Simple	(C) Un-weighted	(D) None of thes	C A
(4)	The weigh	its used i	n a price index are:-			
7.70					of prices (D) None of	of these
(5)			drawing a king of spa			
	(A) $\frac{1}{4}$		(B) $\frac{1}{13}$	(C) $\frac{1}{26}$	(D) $\frac{1}{52}$	
(6)					ne two events are said t	o be:-
	(A) Deper		(B) Independent		lusive (D) Both B an	
(7)	Random no	umbers o	can be generated:-			
	(A) Manua	lly	(B) Mechanically	(C) Both A and B	(D) None of these	à
(8)	If the rando	om varia	ible $X'$ denotes the n	umber of heads whe	n three distinct coins a	re tossed,
			the values:-			
			(B) 1, 3, 3, 1		(D) None of these	
(9)	The parame	eters of	the binomial distributi	on $b(x; n, p)$ are	e:-	
	(A) x and	<b>1</b> $n$	(B) $x$ and $p$	(C) $n$ and $p$	(D) $x$ , $n$ and $p$	
(10)	is tr	ue for th	e binomial distribution	n.		
	(A) Mean	> Varian	ce (B) Mean < Varia	ance (C) Mean = V	ariance (D) Mean =	S.D.
(11)			c distribution has			
(12)	(A) 2 In the plur	al sense.	(B) 3 Statistics means:-	(C) 1	(D) 4	
	(A) Method		(B) Numerical Data	(C) Sample values	s (D) Population va	luce
(13)	The proces	s of arra	anging data into rows			iues
			ibution (B) Classific			
(14)			ttributes is called:-	(o) Industria	on (B) rittay	
				ata (C) Oualitativ	re data (D) Grouped o	lata
(15)					hest point on the curve	
	(A) Mode		(B) Median	(C) Mean	(D) All of these	The state of the s
(16)	is the	first step	in calculating the Mo	dian of a data set.	8 6 HESSEN	
			middle values of the		(B) Array the data	
					of importance (D)	
(17)	is a r	elative r	neasure of dispersion.		(6)	and the minor
				(C) Coefficient of va	riance (D) All of the	ese
					The second secon	

Paper Cod		2017 (A)	Roll No	
Number:	6187	INTERMEDIATE PART-I (1	11th CLASS)	

		-1			
STAT	TISTICS PAPE ALLOWED: 20	ER-I (OLD SO	CHEME) (SESSI OBJECTIVE	아이나 얼마나 하나 아이에 얼마나 아이들 맛이다. 아이들이 아이들을 생각하는데 모든데 모든데 모든데 되었다.	M MARKS: 17
Note: think i Cuttin as give	You have four chis correct, fill that of g or filling two or in in objective type LES are not filled.	oices for each object circle in front of that more circles will res question paper and	tive type question as A t question number. Us ult in zero mark in tha leave others blank. No ion 6 on this sheet of O	, B, C and D. The choice marker or pen to find question. Attempt a for credit will be award	oice which you II the circles. as many questions ded in case
(1)		tep in calculating the	Median of a data set.		
	(A)Average the tv	vo middle values of th	he data set	(B) Array the data	
	(C) Determine the	relative weights of the	he data values in terms of		
(2)		e measure of dispersion		PERFECTIVE PROPERTY IN THE WORK OF THE	
	(A) Standard Dev	iation (B) Variance	(C) Coefficient of var	riance (D) All of the	se
(3)			nimum if these deviation		
	(A) Mean	(B) Median	(C) Mode	(D) All of these	
(4)	If $S.D.(x) = 5$ , t	then $S.D.\left(\frac{2x+5}{2}\right)$	is:-	(Lay assurance)	
	(A) 5			( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	
(5)	22 - 28	(B) 10	(C) 15	(D) 7.5	
(2)			ng an index are of equal		is:-
(6)	(A) Weighted	(B) Simple		(D) None of these	
(0)	(A) Percentage of	in a price index are:- total price (B) Quar	ntities (C) Average of	fprices (D) None of	theco
(7)			ides from a pack of 52 c		illese
	(A) $\frac{1}{4}$	(B) $\frac{1}{13}$		(D) $\frac{1}{-}$	
(8)	1000 VX	4.4	(C) $\frac{1}{26}$ ne of another event, the	52	
106	(A) Dependent	(B) Independent			
(9)	, 중 학 시작	can be generated:-	(C) Mutually exclus	sive (D) Both B and	C
****	(A) Manually	(B) Mechanically	(C) Park A and D	ODANI WA	
(10)		DATE SOUTH STEWNOONS THE SOUTH ST		(D) None of these	
(WEEK)	then $'X'$ assumes	the values:-	number of heads when t	hree distinct coins are	tossed,
	(A) 0, 1, 2, 3	(B) 1, 3, 3, 1	(C) 1, 2, 3	(D) None of these	
(11)			ation $b(x; n, p)$ are:		
		(B) x and p			
(12)		ne binomial distribution	@16. @10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 -	(D) $x$ , $n$ and $p$	
3455TM				47 VASSE 176	
(13)	The hypergeometri	ic distribution has	iance (C) Mean = Var	tiance (D) Mean = $S$ .	D.
A.S.S.K	(A) 2	ic distribution has (B) 3		1 diam'r 12	
(14)	(ALDAN)	, Statistics means:-	(C) 1	(D) 4	
	(A) Methods	(B) Numerical Data	a (C) Sample values	(D) Population value	es
(15)	The process of arra	nging data into rows	and columns is called:-		
			cation (C) Tabulation		
(16)		attributes is called:-		167 /A ==5	
	(A) Continuous dat	a (B) Quantitative of	data (C) Qualitative o	data (D) Grouped dat	a
(17)	When a distribution	is symmetrical and h	nas one mode, the higher		
	(A) Mode	002200000-11 ( 0.4500	(C) Mean	(D) All of these	a vertical and the state of the

# BOARD OF INTERMEDIATE AND SECONDARY EDUCATION,

MULTAN
OBJECTIVE KEY FOR INTER (PART-I/II) Annual Examination, 2017.

os.	Paper Code	Paper Code	Paper Code	Paper Code	Q.	Paper Code	Paper Code	Paper Code	Pa
	2181	2183	2185	2187	Nos.	6181	6183	6185	610
	В	B	Α	c	t.	B	A	B	0
	c	B	A	C	2.	e	C	A	C
	B	Α	c	_	3.	C	A	C	0
	B	8	B	A	4.	D	B	B	1
-	C	C	C	A	5.	B	B	Ď	C
	C	B	B	C	6.	C	C	B	1
	C	3	C	B	7.	B	C	C	D
	A	C	B	c	8.	A	D	A	1
	Α	C	B	B	9.	c	B	C	0
	c	C	Α	C	10.	B	C	A	A
	B	Α	B	B	11.	D	B	B	C
	c	Α	C	B	12.	B	A	B	A
	B	C	B	A	13.	C	C	C	B
	c	B	B	B	14.	A	B	C	B
	В	C	4	c	15.	c	D	D	C
	B	B	c	B	16.	A	B	B	-
L	1	C	c	В	17.	B	C	C	1
					18.		-		U
					19.				
					20.				_

# ثانوی و اعلیٰ ثانوی تعلیمی بورڈ، ملتان

مودند: <u>4/5/12</u> مضمون: شما دما <u>سر پرچ</u>: <u>ک</u> گروپ: جزل بدایات برائے مارکنگ Key ایونکیم (مارکنگ کیم) انثر يارث فرسث *اسيكنڈ س*الاند *ا*ضمنی امتحان 2017ء

C. #	Codo	Error Indicated	Sr#	Code	Error Indicated
			8.	SP	Spelling Error
1.	UN	Un-Necessary	9.		Punctuation
2.	Ir	Irrelevant			Wrong word error
3.	IN	Incomplete	10.		
4.	EX	Extra	11.	Wt	Wrong Tense
5.	Rp	Re-Produced	12.	Wf	Wrong Form
Clark Company	T/P	Insufficient	13.	OA	Over Attempt
6. 7	Gr	Grammar Error			

اہم نوٹ: ہرسوال "Full Award" ہے کم نمبرلگانے کی صورت میں وجہ ضرور لکھیں۔ (Section I 8×2 = 16 Allempt any eight parts, each of 2 marks:

V- X = A + = 50 + = 100

vi- Gm = (1x4x16) = (64) = 4

vii - mode = 3 mediun - 2 moon = 3(\$0) - 2(30) = 60

 $xi - Pon (Paraschous) = \frac{EP_n 2n}{EP_3 9} = \frac{294 \times 100}{269} = 109.3$ 

Allempt any eight pasts, each of 2-marks :

SK = 3 (mean - median) Vii-

3(50-48)

=> SD = 6 i.e Var = 36

SK = 3(Mean - median) = 3(50-48) = 1 viii-

PIANB) = PIA) + PIB) - PIAUB) = 4+3-12 = 1/12 xi -

PIANS) = P(3)P(4/8) = 0.4x0.375 = 0.15 xii-

Attempt any six parts, each of 2 marks:

682 =12

iv - E(-3x+2) = -3E(x)+2 = -3(5)+2 = -13

 $V - VAY(X) = EX^{-}(EX)^{2} = 12 - (3)^{2} = 3$ 

Mean = DP = 10x0.6 = 6 Var = npg = 10x0.6x0.4= 2.4

ix - P(x41) = P(x=0) = & & 10 = 0.083

WASIR ARBAS. SIPVA G. C. Xhanewal

8x1 = 16

(0)

; Atab Ahmad Ansar iii Ameer Ahmerl

Q2

Q3

RY