

Level:	Intermediate	Semester:	Spring, 2022
Course & Code	Statistics-I (394)	Maximum Marks:	100
Time Allowed:	03 Hours	Pass Marks:	40

Q. No.					Question	15					Marks
Q.No.1	(a) What (b) Defin	are the	different ptive and	method	s of presential statist	itatio	n of stat	istical da	ta?	en them.	(10+10)
Q.No.2	(a) Differ	entiate	between i	(i) Popu	lation and e followin	Sam g dat	ple (ii) I a.	Paramete	rand	Statistic	(10+10)
	Classes		The second second	40-90		_	00-105	105-12	0	120-140	
	l f	40	110	150	200	_	20	30		20	
Q.No.3	(a) Define (b) Calcu							its.	Da.		(10+10)
	Groups	25-5	50 50	0-75	75-100	1	00-125	125-15	0	150-175	
	frequenc		11:	2	: 16	1		20	13	18	
Q.No.4	phone in the same	late vari	ance and	co-effic	cient of va	riatio	n from	the follow	e dis	data:	(10+10)
	X	525	500	47:		)	425	400	_	375	
	(a) Define		35	46	137		47	34		22	(10+10)
	(b) Comp Commot	lities	Price	1953	Quantity	1	Price	1963	1)	antity	
	A	2	2	50		1	0	40			
	В	3		10		8		5			
	C	4		5		4		5	_		
Q.No.6	(a) Discus (b) A box box one a odd or eve	t a time en odd e	ns 9 ticker, find the even?	ets num e probat	bered 1 to pility that	9. I they	f 3 ticke are alter	oroaches ets are d nately e	awn	from the	(10+10)
Q.No.7	(a) Define (b) Comp	randon ute mea	n variable n, standa	and given	ve an exar	nple ocffi	to explai	n it. variation	fron	n the data	(10+10)
	X	0	1		2	3		4	5		
	P(x)	6/36		/36	8/36	6/		4/36	12	/36	
Q.No.8	(a) What i (b) A com Find the e	mittee	of size 5	is to be	selected a	ranc	iom fron	n 3 wom	en ar	nd 5 men.	(10+10)



Level:	Intermediate	Semester:	Spring, 202
Course & Code	Statistics-I (394)	Maximum Marks:	100
Time Allowed:	03 Hours	Pass Marks:	40

Q. No.				Q	uestions					Ma
Q.No.1	i) Po		ing terms: and sample variable	ii) Param						(2
Q.No.2	b) Defin	e Histogr	important am. Draw a	Histogran	n for the f	ollowing			ibution:	(10+
	X f	32		42 4° 28 4°		57 31	62	67		
Q.No.3	b) A bus the va	dinary me traveling rious stag	an and why 200 miles	2 has ten str rved to be	iges at equ 10, 15, 20	al interv ), 75, 20,	als. The	speed (	it preferred of the bus in and 40 miles	(10+
Q.No.4	a) Expla b) Comp	in the diff	ference betw on and mean 10	veen abso	lute disper n from the 4 16	Sion and	relative	dispers	ion en below:	(10+
Q.No.5	b) Find Years	rentiate be	tween the s mber using 1978 197	imple and	as base (	e index : ii) avera	ge of the	he price	985	(10+
Q.No.6	a) Discuss the classical and posteriori definitions of probability in detail. b) In a poker hand consisting of 5 cards, what is the probability of holding? i) 2 aces and 2 kings ii) 5 spades							3?	(10+	
Q.No.7	a) What b) Calcu	do you m late mean	ean by expe	cted valu	e? What a	re the proposition	operties ty distri	of expe	ctation?	(10+
	X	0	1	2	3	4				
	Verify th	1/126 nat E (2X-	20/126 +3) = 2 E(X		40/12	6   5/12	16			
Q.No.8	a) Define b) Is it p	e the bino ossible to	mial probab	ulity distr	ribution w	ith mean	= 5 and	d S.d = 4	? comment	(10+

Level: Intermediate
Paper: Statistics-1 (20%)
Time Allowed: C3 Hours

Semester: Spring 2019 Maximum Marks: 100 Pass Marks: 40

#### Note: ATTEMPT FIVE QUESTIONS. QUESTION # 1 IS COMPULSORY.

Q. # 1:	Fill in the blanks:	(20)
40	A variable is called when its value cannot be exactly determined.	
ñ.	In Histogram, with unequal class intervals, the area of each rectangle is	to clear
ibi.	In qualifetive data, the most suitable average is	
iv.	A measure of dispension expressed as a confliction is called measures of dispe	esion.
v.	Inboth quantities and prices are used	
vi.	Two events are if they have wo common point.	
vii.	The probability function is in writing	
viii.	The mean of probability distribution is a slod	
ix.	Binomial distribution has	
ж.	Binomiel distribution is symmetrical when	
Q. # 2:	ay Distinguish between primary and see, without out and give different sources from ware obtained.	tich these
	6) What are different methods of representation of leatistical data?	(19+ta)
Q.#3:	a) Dofine arithmetic mean, geometric me send he monic ween. Faplain the situations of them is used perfectly?	
	b) Calculate geometric mean for the following unprouped data of the percentage change weight of eight animals.	ges in the
	45, 30, 35, 40, 44, 32, 42, 37	
		(20+10)
Q. # 4:	<ul> <li>a) Explain the difference between absolute dispersion and relative dispersion. Despreparties of the standard deviation.</li> </ul>	criho the
	b) Calculate first feet moments about mean for the following set of examination nurks.	
	45, 32, 37, 46, 39, 36, 41, 48 and 36.	
en wer	WANTED TO AN ON THE PROPERTY OF THE PROPERTY O	(10+10)
Q. # S:	<ul> <li>a) What is an index number? Give the us. of an emea number.</li> </ul>	
	b) Compute Pinher's index number for the finlowing data:	
	Commodition Base Year Current Year  Print Quantity  A 7 70 5 49 50 49 50 5 50 50 50 50 50 50 50 50 50 50 50 5	M
		(10+10)
2. # 6: 0	Define mutually exclusive, independent and dependent events.	
	by A set of eight cards contains one jokut \ unit i' we two players. A choose 5 carris at	molom,
- 9	Is takes the remaining 3 cards, what is the promision that A has a joker?	(10+10)
r synter	THE THE STATE OF THE PROPERTY OF THE THE PROPERTY OF THE PROPE	120-1209
47:	e) Define random variable and give an example to examine it.	and have
- 4	by There are three children in a family. Let the random variable denote the number of t	oys in #
	family. Write down the possible outcomes and the values assigned by the random	variable
- 1	assuming equal chances for hoys and girls.	
		(10+10)
	of Find the binomial distribution whose mean is 12 and standard deviation is 3.	
A CONTRACT	b) The incidence of an occupational disease in an infustry is such that the workers by	vo 2014
	chance of suffering from it. What is the probability that out of 6 workmen;	
	) not more than 2 will catch the disease	
	ii) 4 or more will canch the disease	
		(10+10)



Level: Intermediate

Paper: Statistics-I (394) Time Allowed: 03 Hours Semester: Spring 2016 Maximum Marks: 100 Pass Marks: 40

Note: ATTEMPT FIVE QUESTIONS. QUESTION NO. 1 IS COMPULSORY.

#### Q. 1:Fill in the blanks. 20 A sample is a ----- of the population. 1 ii) A quantity which is fixed is called a The arrangement of data in rows and columns is called ----mi) Mean of a ----- is a constant itself. iv) Sum of deviation from ........ is zero W) Varianceof a ----- is zero. ui) index number of single variable is .--- index number. will A list of all possible outcomes of a random experiment is called --wiii) A discrete probability distribution may be represented byix) Mean and variance of a binomial distribution are ----- and -----\*) Q.2: a] Define the following terms: Parameter, Primary data, Pabulation, Population, Descriptive States b) Write down the main characteristics of Statistics. 10 Q.3: a) What are the qualities of good average? 10 b) The deviations from 25.5 of 15 values are: 15.4.-1.9, 6.2, 13.7, 24.6, 25.5, 3.8,-7.9, -13.6, 21.1, 16.4, 18.7,-14.3,-9.8 and 4.9. Calcula ethe arithmetic mean.

p.7.0



Level: Intermediate

Paper: Staristics-1 (394)

Time Allowed: 03 Hours

Semester: Spring 2017 Maximum Marks: 100

Pass Marks: 40

## Note: ATTEMPT FIVE QUESTIONS, QUESTION NO. 1 IS COMPULSORY.

40 4000 400	DATA.				
L Sum of the	e modom exers e	onel to			
	feach bur is		he freezen	ay it mgrassiat	EI:
	tion having two p			dietributi	
	crago should not			values.	Page 1
	of standard devia				betander to bothe a
from all of	beervations ortu valude saleres	andati pris	ve was stand	-United Street, Street, St.	
	B), flatz A smil B				
	of probability dis				
	variable is also n			worinble.	
z. Binomial	fistribution is syn	americal:	syben	A STATE OF	PRIS.
Q. # 2ss) Derine Des	origina and Infor	onelli fitta	inter and	differentiate be	tween them.
					mbers are 34 and 18 Mean of the first tow (1.0+10)
	4 1 1 1 1 1	Sec. 1	. W	10 10 10	beervelion so 42 and 5
correct value of b) What is to	Too officient of e	ne natron ur stien	t values e	rare 35 wint 39	I had copied down not respectively. Find the infragrancy curve as
monaured by ti		9	Pre-100/2017		(10+10)
	- Tarama Casarra al Bassa.				
Q. #4: a) Compare th	s following cours	gross			
C	C. Harris				
	Composite inde		1000	450.0	
" Preduct	dado bese metho		HI III		神川川川
h) Commun II	alson's Indian mund	ber fee tag	followers	datat	
		A CONTRACTOR	and the same	y more	
Commodition	Been Yeu		Carre	at Year	
		bundfily	Pylon	Quantity	
A	7	75	3	49	
- n	1	07	7	28	
C	10	33	- 9	29	
D	9	30	4	42	
В	3	16	10	25	
					(10+10)
A					
Quanta) A box out	mane 9 makete au	I beroden	to 9, II 3	tickels are dri	wa from the bex one
time, find the	probability that t	fany arc at	termatively	nichmr odd ey	so odd or even odd ave
10.7%	much that a amoun	OL CASTI WAS	a grade co	CA, Bot Cm.	distribution evidential level O. O.
b) The proba 0.15 and 0.57 then C.	respectively. Wi	int is the p	prohobility	that the stude	at will get a grade low (10+10)
0.15 and 0.53 then C.					at will get a grade low (10+10)
0.15 and 0.53 than C. Q. # 6:a) What are	andon numbers				at will get a grade low (10+10)
G.15 and 0.53 than C. Q. # 6:a) What are expisite their	candens numbers application.	and how	these are	generated? A	at will get a grade low (10+10) iso, give su comple
G.15 and 0.53 than C. Q. #6:a) What are emphass their b) Four halls number of wi	candom numbers application. not drawn from a	and how	there are uning 5 w	generated? A	at will get a grade love (10+20) iso, give an example is balls. IFX denotes to s of the random wistable
G.15 and 0.53 then C.  Q. # 6: a) What are exprain feels b) Four halls mamber of will X,	candon numbers application not drawn from a nito balls drawn, t	and how bag contr has write	those are sining 5 w down the	generated? A hire and 3 blue possible value	at will get a grade love (10+10) iso, give an example is is balls. IFN denotes the s of the random vertable (10+10)
G.15 and 0.53 then C.  Q. # 6:a) What are exprain their b) Four halls number of will. X.  Q. # 7:a) Find the pr	candon numbers application not drawn from a nito balls drawn, t	and how bay count has write	those are sining 5 w down the	generated? A hire and 3 blue possible value	at will get a grade love (10+10) iso, give an example is is balls. IFX denotes the s of the random wistable
G.15 and 0.53 then C.  Q. # 6: a) What are exprain floring b) Four halls number of will X.  Q. # 7: a) Find the promoting equ	candom numbers application. not drawn from a nito balls drawn, t ububility distribu al probabilities fo	and how bag count has write tion of the	those are sining 5 w down the manafee of 1 girls.	generated? A hire and 3 blue possible value of boys in fami	at will get a grade love (10+20) iso, give an example is is balls. IFN denotes the sof the random veriable (10+20) lies with three shilldow
G.15 and 0.53 then C.  Q. # 6:a) What are exprain their b) Four halls number of will X.  Q. # 7:a) Find the prantocolog equ b) A protector.	candem numbers application not drawn from a nite balls drawn, t obobility distribu of probabilities for on sandom variet	and how bag conti- tion of the close of the	those are sining 5 w down the manufect of girls.	generated? A blue possible value of boys in family function $f(x)$	at will get a grade love (10+10)  iso, give an example is balls. If X denotes to sof the random wirlable (10+10)  lies with three shillows  = *** for X=2 to X=4
G.15 and 0.53 then C.  Q. # 6:a) What are exprain their b) Four halls number of will X.  Q. # 7:a) Find the prantocolog equ b) A protector.	candom numbers application. not drawn from a nito balls drawn, t ububility distribu al probabilities fo	and how bag conti- tion of the close of the	those are sining 5 w down the manafee of 1 girls.	generated? A blue possible value of boys in family function $f(x)$	at will get a grade love (10+20) iso, give an example is balls. IFN denotes to sof the random veriable (10+20) lies with three shildow
G.15 and 0.53 then C.  Q. # 6:a) What are exprain their b) Four halls number of will X.  Q. # 7:a) Find the prantocolog equ b) A protector.	candom numbers application.  not driven from a nite balls drawn, t  obability distribu of probabilities for  on sandom variet  <3.5) b) P(2.4*	and how beg contained write close of the blow and blo X bas (X<3.5)	finns are sining 5 w down the manber of ligits. a density o) P(X	generated? A him possible value of boys in familiar function $f(x) = 1.5$ ).	at will get a grade love (10+10)  iso, give an example is balls. If X denotes to sof the random wirlable (10+10)  lies with three shilldon  = *** for X=2 to X=4.
G.15 and 0.53 then C.  Q. # 6:a) What are exprain their b) Four halls number of will X.  Q. # 7:a) Find the pranounting equ b) A protector Find a) P(X Q. # tha) What is a B	candem numbers application.  not drawn from a nite balls drawn, t  conditing distribu d probabilities for no sandom variel  <3.5) b) P(2.44 inornial experiments	and how bag conta ben write close of the c boys and ole X bas X<3.5)	finns are sining 5 w down the manuface of girls. a demity o) P(X	generated? A nine and 3 blan possible value of boys in fami function $f(x)$ =1.5).	at will get a grade low (10+10)  iso, give on example  is balls. If X denotes to sof the random wirlab (10+10)  lies with three shildon  = *** for X=2 to X=4

Culculate the more tember of about in a single throw.



Level: Intermediate Paper: Statistics-I (394) Time Allowed: 03 Hours Semester: Spring 2018 Maximum Marks: 100 Pass Marks: 40

## Note: ATTEMPT FIVE QUESTIONS, QUESTION NO. 1 IS COMPULSORY.

Q. No	Ouestions	Mark
Q.No.I	Fill in the blanks.  i. A variable is called — when its value cannot be exactly determined, iii. A variable that takes numerical values is called — variable, iii. The area of each bar is — to the frequency it represents, iv. In symmetrical distribution, the three averages mean, median and mode are — variable deviations are minimum if computed from — vi. Geometric mean is a suitable average in — method. vii. A set of subsets of set is called — of the set. viii. A set containing only one element in called — set. ix. Random variable is also called — variable. x. Binomial distribution has — parameters.	20
Q.No.2	<ul> <li>a) Distinguish between qualitative and quantitative variables by giving examples.</li> <li>b) Calculate the geometric mean for the following ungrouped data of the percentage changes in the weight of eight animals.</li> <li>45, 30, 35, 40, 44, 32, 42, 37</li> </ul>	10 10
Q.No.3	<ul> <li>a) The relation between arithmetic mean (A, M), geometric mean (G, M) and harmonic mean (H, M) is         AA ≥ GA ≥ H, M         under what situation these are equal.</li> <li>b) Arithmetic mean of 15 values i, ≥0 and by adding 3 more values, the mean remains 20. Find the new three values if ration is a + b + c = 3 + 2 + 1</li> </ul>	10
Q.No.4	a) What is meant by skewness and kurnosis? What aspects of the frequency curve are measured by them?  b) Calculate first four mornants alpost an for the following set of examination marks.  45, 32, 37, 46, 39, 36, 41, 48 and 36.	10
Q.Na.5	a) Compare the following concepts:  i. Simple and composite index ii. Fixed and cluin base method b) An inquiry into the budgets of the middle class families in a city of England gave the following information. What change in cost of living the figures of 1929 show as compared in 1928?  Food Rept Clothing Fuel Mise  Expenses 35% 15% 20% 10% 20%  Price (1928) 150 30 75 25 40  Price (1929) 145 30 65 23 45	10
Q.Nu.6	<ul> <li>a) Explain with examples the terms; random experiment, sample space and an event.</li> <li>b) A purse contains 4 silver and 3 copper coins. If a coin is selected at random from one of the purses. What is the probability that it is a (i) Silver coin (ii) Copper coin</li> </ul>	10 10
Q.No.7	<ul> <li>a) What properties a mathematical function should possess to be a probability function and probability density function?</li> <li>b) A and B throw a die for a prize of Rs. 11. Which is to be won by the player who first throws a 6? If A has the first throw, what are their respective expectations?</li> </ul>	10 10
2.No.8	4) The mean and variance by the binomial distribution are 6 and 2-4 respectively. Find p and n, the two parameters of the binomial distribution.	10

Level: Intermediate Paper: Statistics-I (394) Time Allowed: 03 Hours Somester: Spring 2015 Maximum Marks: 100 Pass Marks: 40

Note: ATTEMPT FIVE QUESTIONS. QUESTION NO. 1 IS COMPULSORY.

L.		Fill in the blanks.	2.0
0.01	i.	First hand collected data are called	
- 1	ü.	A frequency table can be represented graphically by #	
- 1	iii.	A good average should not be effected by values.	
- 1	iv.	A measure of dispersion is	
	v.	Geometric mean is a suitable average in method.	
- 1	vi.	A set containing only one element is called set.	
Ī	vii.	Random variable is also calledvariable.	
- 1	viii.	If X and Y are independent random variables then E(XY)=	
	115.11	Var(kY)=	
	ix.	In binomial experiment successive trials are	
	х.		10
2.2.	a)	Variable, Constant, Quantitative variable, Qualitative variable, Discrete variable,	
	b)	What are different methods of presentation of statistical data?	10
<b>3.1.</b>	a)	What do you mean by Quartiles, Deciles and Percentiles? Also write down their	10
X-1	1100	formulae.	
	b)	The log of 3 values is given below:	10
	0)	0.0310; 0:6020, 0:9030	
	Ĭ.	Show that AM ≥ QM	
	-	Define Mean Deviation and its coefficient. Discuss its advantages and disadvantages	10
Q.4.	a)	Calculate first four inoments about mean for the following set of examination	10
	b)	marks: 45, 32, 37, 46, 39, 36, 41, 48 and 36.	10
Q.5.	a)	Define an index number and describe the different types of index number.	10
	b)	Find the index number of price from the following data taking average price of all years as the base:	10
	l .	Years 1970 1971 1972 1973 1974 1975 1976 1977	
	1	Prices 15 19 21 30 37 38 40 48	
Q.6.	a)	State and prove additional law for mutually exclusive events.	10
		Two urns contain respectively 3 white, 7 red and 15 black & 10 white balls, 6 red	10
	h)	and 9 black balls. One ball is taken from each urn. What is the probability that both will be of the some colour?	
Q.7.	h)	and 9 black balls. One ball is taken from each urn. What is the probability that both will be of the same colour?  What are random numbers? How can they be generated? Explain the applications of random numbers.	
Q.7.		and 9 black balls. One ball is taken from each urn. What is the probability that both will be of the same colour?  What are random numbers? How can they be generated? Explain the applications of random numbers.  Let X be a random variable with probability distribution as follows:    x   1   2   3   4   5	
	a) b)	and 9 black balls. One ball is taken from each urn. What is the probability that both will be of the same colour?  What are random numbers? How can they be generated? Explain the applications of random numbers.  Let X be a random variable with probability distribution as follows:    X   1   2   3   4   5     f(x)   0   125   0.45   0.25   0.05   0.125     Find mean and variance.	10
Q.7. Q. 8.	a) b)	and 9 black balls. One ball is taken from each urn. What is the probability that both will be of the same colour?  What are random numbers? How can they be generated? Explain the applications of random numbers.  Let X be a random variable with probability distribution as follows:    X   1   2   3   4   5     f(x)   0.125   0.45   0.25   0.05   0.125     Pind mean and variance.  Define the following terms:	10
Q.7. Q. 8.	a) b)	and 9 black balls. One ball is taken from each urn. What is the probability that both will be of the same colour?  What are random numbers? How can they be generated? Explain the applications of random numbers.  Let X be a random variable with probability distribution as follows:    X   1   2   3   4   5     f(x)   0   125   0.45   0.25   0.05   0.125     Find mean and variance.	10



Level:	Intermediate	Semester:	Autumn 2021
Course & Code	Statistics-I (394)	Maximum Marks:	100
Time Allowed:	03 Hours	Pass Marks:	40

Q. No.				2	Question				Marks
Q.No.1				stics and e		different m	eanings.		(10+10)
Q.No.2	a) What a	re the d	fferer	t methods	of represe	ntation of	statistical da	ita? od average?	(10+10)
Q.No.3	b) Compu	te the N	1ean a	nd mode fo	or the foll	nd demerits owing data:	200		(10+10)
	Classes	86-90	91-9	10	101-105	106-110	111-115		
Q.No.4	b) Calcula X 30	on of an	ny two tandar	of them w d deviation 34 35 36	ith suitab for the for 37 38	le example: ollowing di		method of	(10+10)
Q.No.5		uct chai	n indi	ces for the	following Year		ng 1940 as	base.	(10+10)
	Wheat Rice Maize	2.9 2.9 3.1	05	3.40 3.60 3.50	3.60 2.90 3.40	4.00 2.75 4.50	1944 4.20 2.75 3.70		***
Q.No.6	a) What do	o you u	nderst	and by sam	pie space black bal	event and s. Find the	compound	event? of drawing	(10+10)
Q.No.7	a) Different example of b) A com	ntiate b f each. mittee	etweer	discrete a	and contin	uous rando	nd 3 wome	and give an	(10+10)
Q.No.8	a) Define	the bind nt has th	mial p	probability	distributi	on.		distribution	(10+10)



Level: Intermediate Paper: Statistics-I (324) Time Ailowed: 03 Hours Semester: Spring 2019 Maximum Marks: 100 Pass Marks: 40

#### Note: ATTEMPT FIVE QUESTIONS. QUESTION # 1 IS COMPULSORY.

stogram, with unequal class intervals, the area of each rectangle is	frequency.  iii. In qualitative data, the most suitable average is	ii. In Histogram, with unequal class intervals, the area of each rectangle is		Fill in the blanks:		,			(20)
stogram, with unequal class intervals, the area of each rectangle is	iii. In Histogram, with unequal class intervals, the area of each rectangle is to clast frequency.  In qualitative data, the most suitable average is to A measure of dispersion expressed as a coefficient is called measures of dispersion.  In both quantities and prices are used.  V. In both quantities and prices are used.  VI. Two events are if they have no common point.  The probability function is function.  The mean of probability distribution is called is a grammeters.  Binomial distribution has parameters.  X. Binomial distribution is symmetrical when   #2: a) Distinguish between primary and secondary data and give different sources from which the are obtained.  b) What are different methods of representation of statistical data?  (10+1)  #3: a) Define arithmetic mean, geometric mean and harmonic mean. Explain the situations when car of them is used perfectly?  b) Calculate geometric mean for the following ungrouped data of the percentage changes in the weight of eight animals.  45, 30, 35, 40, 44, 32, 42, 37  (10+1)  #4: a) Explain the difference between absolute dispersion and relative dispersion. Describe the properties of the standard deviation.  b) Calculate first four moments about mean for the following set of examination marks.  45, 32, 37, 46, 39, 36, 41, 48 and 36.  (10+1)  #4: a) What is an index number? Give the uses of an index number.  b) Compute Fisher's index number for the following data:  Commodities   Base Year   Current Year   Price   Quantity   Quantity   Price   Quantity   Price   Quantity   Qu	iii. In Histogram, with unequal class intervals, the area of each rectangle is		A variable is called		when its val	ue cannot	be exactly determined	Ĺ
asure of dispersion expressed as a coefficient is called	iii. In qualitative data, the most suitable average is iv. A measure of dispersion expressed as a coefficient is called	iii. In qualitative data, the most suitable average is iv. A measure of dispersion expressed as a coefficient is called		In Histogram, with ur					
both quantities and prices are used.	iv. A measure of dispersion expressed as a coefficient is called	iv. A measure of dispersion expressed as a coefficient is called	iii.	* *	most suit	able average	is	·	
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rties of the standard deviation. Iculate first four moments about mean for the following set of examination marks.  2, 37, 46, 39, 36, 41, 48 and 36.  (10+10)  at is an index number? Give the uses of an index number. Impute Fisher's index number for the following data:    Commodities   Base Year   Current Year     Price   Quantity   Price   Quantity     A   7   70   5   49     B   5   27   7   28     C   10   35   9   29     D   9   50   4   42	properties of the standard deviation.  b) Calculate first four moments about mean for the following set of examination marks.  45, 32, 37, 46, 39, 36, 41, 48 and 36.  (10+1)  # 5: a) What is an index number? Give the uses of an index number.  b) Compute Fisher's index number for the following data:    Commodities   Base Year   Current Year     Price   Quantity   Price   Quantity     A   7   70   5   49     B   5   27   7   28     C   10   35   9   29     D   9   50   4   42     E   3   16   10   25	properties of the standard deviation.  b) Calculate first four moments about mean for the following set of examination marks.  45, 32, 37, 46, 39, 36, 41, 48 and 36.  (104)  # 5: a) What is an index number? Give the uses of an index number.  b) Compute Fisher's index number for the following data:    Commodities   Base Year   Current Year				. 10 17 25.2	2000000		(10+10)
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Commodities         Base Year         Current Year           Price         Quantity         Price         Quantity           A         7         70         5         49           B         5         27         7         28           C         10         35         9         29           D         9         50         4         42	Base Year         Current Year           Price         Quantity         Price         Quantity           A         7         70         5         49           B         5         27         7         28           C         10         35         9         29           D         9         50         4         42           E         3         16         10         25	Commodities   Base Year   Current Year		a) What is an index nur					
Commodities         Price         Quantity         Price         Quantity           A         7         70         5         49           B         5         27         7         28           C         10         35         9         29           D         9         50         4         42	Commodities         Price         Quantity         Price         Quantity           A         7         70         5         49           B         5         27         7         28           C         10         35         9         29           D         9         50         4         42           E         3         16         10         25	A 7 70 5 49  B 5 27 7 28  C 10 35 9 29  D 9 50 4 42  E 3 16 10 25  (10+6: a) Define mutually exclusive, independent and dependent events.  b) A set of eight cards contains one joker. A and B, are two players, A choose 5 cards at random B takes the remaining 3 cards, what is the probability that A has a joker?  (10+6: a) Define random variable and give an example to explain it.  b) There are three children in a family. Let the random variable denote the number of boys in family. Write down the possible outcomes and the values assigned by the random variable assuming equal chances for boys and girls.	2. # 5:			her for the fo		data:	
A   7   70   5   49     B   5   27   7   28     C   10   35   9   29     D   9   50   4   42	A 7 70 5 49 B 5 27 7 28 C 10 35 9 29 D 9 50 4 42 E 3 16 10 25	A 7 70 5 49  B 5 27 7 28  C 10 35 9 29  D 9 50 4 42  E 3 16 10 25  (10+6: a) Define mutually exclusive, independent and dependent events.  b) A set of eight cards contains one joker. A and B, are two players, A choose 5 cards at rando B takes the remaining 3 cards, what is the probability that A has a joker?  (10+6: a) Define random variable and give an example to explain it.  b) There are three children in a family. Let the random variable denote the number of boys if family. Write down the possible outcomes and the values assigned by the random variable assuming equal chances for boys and girls.	2, # 5:		dex num	DEI TOT THE TO			
B 5 27 7 28 C 10 35 9 29 D 9 50 4 42	B 5 27 7 28 C 10 35 9 29 D 9 50 4 42 E 3 16 10 25	B 5 27 7 28 C 10 35 9 29 D 9 50 4 42 E 3 16 10 25  (10+6: a) Define mutually exclusive, independent and dependent events. b) A set of eight cards contains one joker. A and B, are two players, A choose 5 cards at rando B takes the remaining 3 cards, what is the probability that A has a joker?  (10+6: a) Define random variable and give an example to explain it. b) There are three children in a family. Let the random variable denote the number of boys if family. Write down the possible outcomes and the values assigned by the random variable assuming equal chances for boys and girls.	Q. # 5:	b) Compute Fisher's inc	Bas	e Year	Curre	nt Year	я
C 10 35 9 29 D 9 50 4 42	C         10         35         9         29           D         9         50         4         42           E         3         16         10         25	C 10 35 9 29 D 9 50 4 42 E 3 16 10 25  (10+6: a) Define mutually exclusive, independent and dependent events. b) A set of eight cards contains one joker. A and B, are two players, A choose 5 cards at rando B takes the remaining 3 cards, what is the probability that A has a joker?  (10+6: a) Define random variable and give an example to explain it. b) There are three children in a family. Let the random variable denote the number of boys if family. Write down the possible outcomes and the values assigned by the random variable assuming equal chances for boys and girls.	), # 5:	b) Compute Fisher's inc	Bas Price	e Year Quantity	Curre Price	nt Year Quantity	St.
D 9 50 4 42	D 9 50 4 42 E 3 16 10 25	D 9 50 4 42 E 3 16 10 25  (10+6: a) Define mutually exclusive, independent and dependent events. b) A set of eight cards contains one joker. A and B, are two players, A choose 5 cards at rando B takes the remaining 3 cards, what is the probability that A has a joker?  (10+6: a) Define random variable and give an example to explain it. b) There are three children in a family. Let the random variable denote the number of boys if family. Write down the possible outcomes and the values assigned by the random variable assuming equal chances for boys and girls.	), # 5:	b) Compute Fisher's inc Commodities	Bas Price 7	Quantity 70	Curre Price 5	nt Year Quantity 49	а
	E 3 16 10 25	E 3 16 10 25  (10+ 2. # 6: a) Define mutually exclusive, independent and dependent events. b) A set of eight cards contains one joker. A and B, are two players, A choose 5 cards at rando B takes the remaining 3 cards, what is the probability that A has a joker?  (10+ 2. # 7: a) Define random variable and give an example to explain it. b) There are three children in a family. Let the random variable denote the number of boys in family. Write down the possible outcomes and the values assigned by the random variable assuming equal chances for boys and girls.	), # 5:	Commodities  A B	Bas Price 7 5	Quantity 70 27	Curre Price 5	ent Year Quantity 49 28	а
	Control of the contro	(10+6: a) Define mutually exclusive, independent and dependent events. b) A set of eight cards contains one joker. A and B, are two players, A choose 5 cards at rando B takes the remaining 3 cards, what is the probability that A has a joker? (10+6: a) Define random variable and give an example to explain it. b) There are three children in a family. Let the random variable denote the number of boys if family. Write down the possible outcomes and the values assigned by the random variable assuming equal chances for boys and girls.	), # 5:	Commodities  A  B  C	Bas Price 7 5	Quantity 70 27 35	Curre Price 5 7	ont Year Quantity 49 28 29	э
All the second of the second o		<ul> <li>(a) Define mutually exclusive, independent and dependent events.</li> <li>(b) A set of eight cards contains one joker. A and B, are two players, A choose 5 cards at random B takes the remaining 3 cards, what is the probability that A has a joker?</li> <li>(10+1) # 7: a) Define random variable and give an example to explain it.</li> <li>(b) There are three children in a family. Let the random variable denote the number of boys in family. Write down the possible outcomes and the values assigned by the random variable assuming equal chances for boys and girls.</li> </ul>	), # 5:	Commodities  A B C D	## Bas Price 7 5 10 9	Quantity 70 27 35 50	Curre Price 5 7 9	ont Year Quantity 49 28 29 42	A
		b) A set of B takes the Q. # 7: a) Define r b) There a family. W assuming e	Q. # 5:		a Fichar'e in		a Figher's index number for the to		
at all a graduative independent and dependent events.		B takes the remaining 3 cards, what is the probability that A has a joker?  (10+  # 7: a) Define random variable and give an example to explain it.  b) There are three children in a family. Let the random variable denote the number of boys if family. Write down the possible outcomes and the values assigned by the random variation assuming equal chances for boys and girls.		Commodities  A B C D E	Bas Price 7 5 10 9	Pear Quantity 70 27 35 50 16	Curre   5   7   9   4   10	ent Year Quantity 49 28 29 42 25	(10+16
ne mutually exclusive, independent and dependent events.	# 6: a) Define mutually exclusive, independent and dependent and dependent are two players. A choose 5 cards at random	(104). # 7: a) Define random variable and give an example to explain it. b) There are three children in a family. Let the random variable denote the number of boys in family. Write down the possible outcomes and the values assigned by the random variations assuming equal chances for boys and girls.		Commodities  A B C D E	Price 7 5 10 9 3	Quantity 70 27 35 50 16	Curre Price 5 7 9 4 10	Quantity 49 28 29 42 25 ent events.	
et of eight cards contains one joker. A and B, are two players, A choose 3 cards at random	b) A set of eight cards contains one joker. A and B, are two players, A choose 3 cards at random	b) H 7: a) Define random variable and give an example to explain it. b) There are three children in a family. Let the random variable denote the number of boys if family. Write down the possible outcomes and the values assigned by the random variations assuming equal chances for boys and girls.	), # 6: (	Commodities  A B C D E	Price 7 5 10 9 3	Quantity 70 27 35 50 16 dependent and one joker. A	Curre Price 5 7 9 4 10	ent Year Quantity 49 28 29 42 25 ent events. re two players, A choose	*
et of eight cards contains one joker. A and B, are two players, A choose 3 cards at random as the remaining 3 cards, what is the probability that A has a joker?	b) A set of eight cards contains one joker. A and B, are two players, A choose 3 cards at random B takes the remaining 3 cards, what is the probability that A has a joker?	b) There are three children in a family. Let the random variable denote the humber of boys family. Write down the possible outcomes and the values assigned by the random variates assuming equal chances for boys and girls.  (10+	), # 6: (	Commodities  A B C D E	Price 7 5 10 9 3	Quantity 70 27 35 50 16 dependent and one joker. A	Curre Price 5 7 9 4 10	ent Year Quantity 49 28 29 42 25 ent events. re two players, A choose	ose 5 cards at random,
et of eight cards contains one joker. A and B, are two players, A choose 3 cards at random s the remaining 3 cards, what is the probability that A has a joker?  (10+16)	b) A set of eight cards contains one joker. A and B, are two players, A choose 3 cards at random B takes the remaining 3 cards, what is the probability that A has a joker?	family. Write down the possible outcomes and the values assigned by the random variation assuming equal chances for boys and girls.	), # 6: (	Commodities  A B C D E  a) Define mutually exclusion A set of eight cards of B takes the remaining 3	Price 7 5 10 9 3 usive, incontains of cards, we	Quantity 70 27 35 50 16 dependent an one joker. A that is the pro-	Curre Price 5 7 9 4 10 d depend and B, a	ent Year Quantity 49 28 29 42 25 ent events. re two players, A chood that A has a joker?	(10+10) ose 5 cards at random, (10+10)
et of eight cards contains one joker. A and B, are two players, A choose 3 cards at random s the remaining 3 cards, what is the probability that A has a joker?  (10+16)	b) A set of eight cards contains one joker. A and B, are two players, A choose 3 cards at random  B takes the remaining 3 cards, what is the probability that A has a joker?  (10+16)	family. Write down the possible outcomes and the values assigned by the random variation assuming equal chances for boys and girls.  (10+	), # 6: c	Commodities  A B C D E  a) Define mutually exclusion A set of eight cards c B takes the remaining 3	Price 7 5 10 9 3 usive, incontains of cards, we have and g	Quantity 70 27 35 50 16 dependent an one joker. A that is the president examined to the presiden	Curre Price 5 7 9 4 10 d depend and B, a obability	ent Year Quantity 49 28 29 42 25 ent events. re two players, A chood that A has a joker?	ose 5 cards at random, (10+10)
et of eight cards contains one joker. A and B, are two players, A choose 3 cards at random s the remaining 3 cards, what is the probability that A has a joker?  (10+16)  The random variable and give an example to explain it.	b) A set of eight cards contains one joker. A and B, are two players, A choose 3 cards at random B takes the remaining 3 cards, what is the probability that A has a joker?  (10+16)  # 7: a) Define random variable and give an example to explain it.	assuming equal chances for boys and girls. (10+	), # 6: (	Commodities  A B C D E  a) Define mutually exclusion A set of eight cards of B takes the remaining 3  a) Define random variable.	Price 7 5 10 9 3 sive, incontains of cards, we have and general in a	Quantity 70 27 35 50 16 iependent an one joker. A that is the provive an exam family. Let	Current Price 5 7 9 4 10 d depend and B, a obability ple to expend the random state of	ent Year Quantity 49 28 29 42 25 ent events. re two players, A chood that A has a joker?  plain it.	ose 5 cards at random, (10+10) c number of boys in a
s the remaining 3 cards, what is the probability that A has a joker?  (10+16)  ine random variable and give an example to explain it.  bre are three children in a family. Let the random variable denote the number of boys in the country. Write down the possible outcomes and the values assigned by the random variable.	<ul> <li>b) A set of eight cards contains one joker. A and B, are two players, A choose 3 cards at random B takes the remaining 3 cards, what is the probability that A has a joker?</li> <li>#7: a) Define random variable and give an example to explain it.</li> <li>b) There are three children in a family. Let the random variable denote the number of boys in family. Write down the possible outcomes and the values assigned by the random variable.</li> </ul>	(101	), # 6: (	Commodities  A B C D E  a) Define mutually exclusion  b) A set of eight cards of B takes the remaining 3  a) Define random variable b) There are three child family. Write down the	Price 7 5 10 9 3 sive, incontains of cards, we have possible and general in a see possible cards.	Quantity 70 27 35 50 16 dependent an one joker. A that is the provive an exam family. Let	Current Price 5 7 9 4 10 d depend and B, a obability ple to expend the random state of	ent Year Quantity 49 28 29 42 25 ent events. re two players, A chood that A has a joker?  plain it.	ose 5 cards at random, (10+10) c number of boys in a
s the remaining 3 cards, what is the probability that A has a joker?  (10+16)  The random variable and give an example to explain it.  The are three children in a family. Let the random variable denote the number of boys in the Write down the possible outcomes and the values assigned by the random variable denote the number of boys in the possible outcomes and the values assigned by the random variable denote the number of boys in the possible outcomes and the values assigned by the random variable denote the number of boys and girls.	b) A set of eight cards contains one joker. A and B, are two players, A choose 3 cards at random B takes the remaining 3 cards, what is the probability that A has a joker?  (10+16)  # 7: a) Define random variable and give an example to explain it.  b) There are three children in a family. Let the random variable denote the number of boys in family. Write down the possible outcomes and the values assigned by the random variable shapes for boys and girls.		), # 6: (	Commodities  A B C D E  a) Define mutually exclusion  b) A set of eight cards of B takes the remaining 3  a) Define random variable b) There are three child family. Write down the	Price 7 5 10 9 3 sive, incontains of cards, we have possible and general in a see possible cards.	Quantity 70 27 35 50 16 dependent an one joker. A that is the provive an exam family. Let	Current Price 5 7 9 4 10 d depend and B, a obability ple to expend the random state of	ent Year Quantity 49 28 29 42 25 ent events. re two players, A chood that A has a joker?  plain it.	ose 5 cards at random, (10+10) c number of boys in a the random variable
et of eight cards contains one joker. A and B, are two players, A choose 3 cards at random s the remaining 3 cards, what is the probability that A has a joker?  (10+16)  (10+16)  (10+16)  (10+16)  (10+16)  (10+16)  (10+16)  (10+16)  (10+16)  (10+16)  (10+16)	b) A set of eight cards contains one joker. A and B, are two players, A choose 3 cards at random B takes the remaining 3 cards, what is the probability that A has a joker?  (10+16)  # 7: a) Define random variable and give an example to explain it.  b) There are three children in a family. Let the random variable denote the number of boys in family. Write down the possible outcomes and the values assigned by the random variable assuming equal chances for boys and girls.	b) The incidence of an occupational disease in an industry is such that the workers have 2	), # 6: ( ), # 7:	Commodities  A B C D E  a) Define mutually exclusion  b) A set of eight cards of B takes the remaining 3  a) Define random variable b) There are three child family. Write down the assuming equal chances	Price 7 5 10 9 3 sive, incontains of cards, we have possible and general in a second property of the possible for boys	Quantity 70 27 35 50 16 dependent an one joker. A that is the provive an exam family. Let ole outcome and girls.	Current Price 5 7 9 4 10 d depend and B, a obability ple to expense the randos and the	ent Year Quantity 49 28 29 42 25 ent events. re two players, A chood that A has a joker? claim it. om variable denote the evalues assigned by	(10+10) c number of boys in a the random variable (10+10)

(10+10)

chance of suffering from it. What is the probability that out of 6 workmen:

i) not more than 2 will catch the disease ii) 4 or more will catch the disease



Level:	Intermediate	Semester:	Autumn 2021
Course & Code	Statistics-I (394)	Maximum Marks:	100
Time Allowed:	03 Hours	Pass Marks:	40

Q. No.	Questions										
Q.No.1	a) Define the word statistics and explain its different meanings.     b) Define primary and secondary data with examples.										
Q.No.2											
Q.No.3	a) Define a b) Comput Classes	te the M 86-90	ean and 91-95	96-100	the follo	wing data; 106-110	A.D		(10+10)		
Q.No.4	a) Discuss the different measures of dispersion. Describe the method of computation of any two of them with suitable examples. b) Calculate the standard deviation for the following distribution:    X   30   31   32   33   34   35   36   37   38   39     F   4   8   23   35   62   44   18   4   1   1										
Q.No.5	a) Write down the uses and limitations of index numbers. b) Construct chain indices for the following years, taking 1940 as base.    Item   Year								(10+10)		
		194	1940		1942	1943	1944				
	Wheat	2.8			3.60	4.00	4.20				
	Rice Maize	2.9		3.60	2.90	2.75 4.50	3.70				
Q.No.6	a) What do you understand by sample space, event and compound event?										
Q.No.7	<ul> <li>a) Differentiate between discrete and continuous random variable and give an example of each.</li> <li>b) A committee of size 5 is selected from 5 men and 3 women. Find the expected number of female members on the committee.</li> </ul>										
Q.No.8	a) Define the binomial probability distribution.										

Level: Intermediate Paper: Statistics-I (394) Time Allowed: 03 Hours

Q.

Semester: Autumn 2018 Maximum Marks: 100 Pass Marks: 40

Note: ATTEMPT FIVE QUESTIONS. QUESTION # 1 IS COMPULSORY.

Fill in the blanks:						(20)					
The quantity which	loes not var	v from indi	ividual to	individual is o	called						
-	із арріїса	DIC WITCH	no noque	nicy distribut	ion tends to	## 00#					
	cuitable av	oroge in	m	ethod							
Kandom numbers are obtained in such a way that each digit has probability.  A random variable is also named as a variable.											
ivican of the omound	i distributio	n is rip and	no varian	W 15							
a) Distinguish between	en primary	and second	dary data	and give diffe	erent sources fro	m which these					
are obtained.			•	Ü							
	e given bel	ow:									
			160, 0.014	48							
		,				•					
						(10+10)					
a) What do you un	derstand by	v classifica	tion and	tabulation? I	Discuss their im						
	•					- K					
-	of 15 values	s is 20 and	by adding	2 3 more valu	es, the mean rer	nains 20. Find					
			-,	,	,						
	,					(10+10)					
a) What are moments	about mean	and about	an arbitra	ry value. Giv	e the relation bet						
b) For a group of 50	boys, the m	ean score a	ind the sta	mdard deviati	ion of scores on	a test are 59.5					
and 8.38 respectively.	for a grou	p of 40 girl	s, the mea	an and standa	rd deviation are	54.0 and 8.23					
					TOI MIC COMOMIC	sa group or so					
						(10+10)					
Define weighted an	d un-weigh	ted index n	umbers ar	id explain wh	v weighted inde	v numbers are					
			umbero u	io orpidili vili	y weighted mac	x numbers are					
				to do Co. d							
	s , Paascne	s and Fish	er's ideal	index for the	tollowing data	with 1992 as					
					1						
Item											
W/hoof Wilson											
CHARACTER CONTRACTOR	10.41	10.50	IKg	ING		(10+10)					
						(10+10)					
Define permutation a	nd combina	tion and dis	scriminate	between thes	se two.						
						a ic 65 and 2					
	-				. MAN TELEVISION CYNY III	c ma ob ama b					
2 against a person B	now 45 ye	ars of age	living till	he is 75. Fin	d the probability	that one of					
	The quantity which of A Histogram is a lifextreme large or single A measure of disperson Shepherd correction directions. Geometric mean is a The number of subset Random numbers are A random variable is Mean of the binomia a) Distinguish between are obtained. b) Reciprocals of x and 0.0267, 0.0235, 0.021 Calculate Harmonic Mean of the new three values in the new th	The quantity which does not van A Histogram is a bar of If extreme large or small values A measure of dispersion is Shepherd correction is applicated directions.  Geometric mean is a suitable avoid the number of subsets of a set of Random numbers are obtained in A random variable is also named Mean of the binomial distribution a) Distinguish between primary are obtained.  b) Reciprocals of x are given belefully as a set of the distribution and the binomial distribution and by Reciprocals of x are given belefully as a set of the distribution and the distribution and the distribution and by Reciprocals of x are given belefully as a set of the distribution and by Reciprocals of x are given belefully as a set of the distribution and by Reciprocals of x are given belefully as a set of the distribution and by Reciprocals of x are given belefully as a set of the distribution and analysis.  b) Arithmetic Mean of 15 values the new three values if ratio is a set of the distribution and a set of the distribution and the same test. Find the distribution and combinate and suppose that it is 9 to 7 against a suppose the distribution and a suppose that it is 9 to 7 against a suppose the distribution and a suppose that it is 9 to 7 against	The quantity which does not vary from indita A Histogram is a bar chart with no If extreme large or small values are changed A measure of dispersion is Shepherd correction is applicable when the directions.  Geometric mean is a suitable average in The number of subsets of a set containing mandom numbers are obtained in such a way A random variable is also named as a Mean of the binomial distribution is mp and a) Distinguish between primary and second are obtained.  b) Reciprocals of x are given below: 0.0267, 0.0235, 0.0211, 0.0191, 0.0174, 0.0 Calculate Harmonic Mean of the data.  a) What do you understand by classificat statistical analysis.  b) Arithmetic Mean of 15 values is 20 and the new three values if ratio is a:b:c:: 3:2:1.  a) What are moments about mean and about the new three values if ratio is a:b:c:: 3:2:1.  a) What are moments about mean and about the new three values if ratio is a:b:c:: 3:2:1.  b) For a group of 50 boys, the mean score a and 8.38 respectively, for a group of 40 girl respectively on the same test. Find the mean children.  c) Define weighted and un-weighted index numbers.  c) Calculate Laspeyre's, Paasche's and Fish ase:  Item Average Price (Rs)  Wheat Flour 4.38 4.57  Rice 14.15 15.58  Moong Pulse 18.67 17.28  Gram Pulse 10.41 16.36	The quantity which does not vary from individual to A Histogram is a bar chart with no space be If extreme large or small values are changed, values A measure of dispersion is  Shepherd correction is applicable when the freque directions.  Geometric mean is a suitable average in me The number of subsets of a set containing n points are Random numbers are obtained in such a way that each A random variable is also named as a values are obtained.  a) Distinguish between primary and secondary data are obtained.  b) Reciprocals of x are given below: 0.0267, 0.0235, 0.0211, 0.0191, 0.0174, 0.0160, 0.014  Calculate Harmonic Mean of the data.  a) What do you understand by classification and statistical analysis.  b) Arithmetic Mean of 15 values is 20 and by adding the new three values if ratio is a:b:c::3:2:1.  a) What are moments about mean and about an arbitrate of the state of the same test. Find the mean and standard the state of the same test. Find the mean and standard the same test. Find the same	The quantity which does not vary from individual to individual is. A Histogram is a bar chart with no space between its bar. If extreme large or small values are changed, values of A measure of dispersion is Shepherd correction is applicable when the frequency distributed inections.  Geometric mean is a suitable average in method.  The number of subsets of a set containing n points are Random numbers are obtained in such a way that each digit has A random variable is also named as a variable.  Mean of the binomial distribution is np and its variance is and its variance is and its variance is are obtained.  b) Reciprocals of x are given below: 0.0267, 0.0235, 0.0211, 0.0191, 0.0174, 0.0160, 0.0148  Calculate Harmonic Mean of the data.  a) What do you understand by classification and tabulation? It statistical analysis. b) Arithmetic Mean of 15 values is 20 and by adding 3 more value the new three values if ratio is a:b:c::3:2:1.  a) What are moments about mean and about an arbitrary value. Given a group of 50 boys, the mean score and the standard deviation and 8.38 respectively, for a group of 40 girls, the mean and standard respectively on the same test. Find the mean and standard deviation children.  b) Define weighted and un-weighted index numbers and explain who referred over un-weighted index numbers. c) Calculate Laspeyre's, Paasche's and Fisher's ideal index for the asc:  Item	The quantity which does not vary from individual to individual is called					

(10+10)

Q. #7: a) What is meant by probability distribution? Distinguish between discrete and continuous

Q. #8: a) Find the mean and standard deviation of the Binomial Distribution  $(q + p)^n$ 

random variables by giving examples.

assuming equal chances for boys and girls.

b) A committee of size 3 is selected from 4 men and 2 women. Find the probability distribution by hypergeometric experiment for the number of men on the committee.

b) There are three children in a family. Let the random variable denote the number of boys in a family. Write down the possible outcomes and the values assigned by the random variable

(10+10)

(10+10)