			, ,				ı	, , , , , , , , , , , , , , , , , , , 		
Registr	ation no:									
Γotal Nu	ımber of <u>P</u> aડ્	ges:02	102		102		102		102	MCA ₂
		3 rd Sen PR		BILITY	k Exar ′ AND NCH: M	STAT				
102	102		102	Max Q.CC	: 3 Ho Marks: DE: Y	70 718	102	_	102	102
Ansv	ver Question The fi	on No.1 gures i			-	•		•		rest.
Q1 02	Answer the	followi	ng ques	stions:	102		102		102	(2x10) ¹²
a) b) c)	A die is rolled number and t State Baye's What are the	the coin s theorem?	hows a l	nead.	·			e die shov	vs an odd	
d) e) 102 f) g) h) i)	What is the p What is the d What is Stand What is samp Define one to Define most of Define Type-	probability lifference dard Erro pling distri ailed and t efficient e	that a le betweer r? 102 bution? two tailed	eap yean Point of test.	r contair Estimatio	s 53 Son and	undays?		ገ ? 102	102
Q2	What is a pro				ion? If X	is disc	rete ran	dom varia	able having	(2+8)
	x	•	1	2	3		4	5	6	7
	$p(X=x_i)$	0	k	6k ²	2k		3k	4k ²	3k	
30 -\	Find (i)the va									
Q3 a)	Two random	(-		sity tun				(5)
102	f(x,y) =	`					102		102	102
b)	Show that X Check wheth A typist was found that the distributed. If (ii)between 1	er the cor given ar he report 10 pages	nditional assign contair are sel	density ment to ns 30	/ functior o type 2 typing e	i is vali 00 pag errors a	d. les of a and the	project re	eport. It wa	nly `´
	, ,		-							

Q4 a) If X is normally distributed with mean 8 and standard deviation 4 then find (i) $p(5 \le X \le 10)$ (ii) $p(10 \le X \le 15)$ (iii) $p(X \le 15)$

(5)

	b)	State and prove	Chebysl	nev's Ine	equality	,						(5)
Q5	a)	variable with the following probability distribution.										(5)
102		102		102 X		3 ¹⁰²	6		9		102	102
			P	(X=xi)	1	/6	1/	/2	1/:	3		
	b)	Find E(X), E(X^2), Var(X) and E[$(1+2X)^2$]. Consider a Poisson distribution with probability mass function: (5)										(5)
102		$f(x) = \frac{1}{x}$	$\frac{e^{-\lambda}\lambda^x}{x!}, x$:1= 0,1,2	2,3,	• 102		102			102	102
		Suppose that a	random	sample	X_1, X	o 9 • • • •	X is	taken f	rom the	e distrib	oution.	
		What is the max			-	_		-		-		
		What is the max	annann inc	omiood	ootimat	0 01 70	•					
Q6	a)	The specimen o	f aluminu	ım wires	s drawn	from a	large l	ot has t	the follo	owing b	reaking	(5)
	•	strength (in kg.										` ,
102		102		4,596,5	•			•	•		102	102
		Test whether the 578kg.weight .U			•	-	ne lot m	nay be t	taken to	o be		
		576kg.weight.U	se 0.05 i	everors	signinca	ince.						
	b)	In an anti-malar persons out of										(5)
		below:	- 10 10 p	opulatio		240.111			evel c	a303 13	SIIUWII	
101		below: Treatment		Feve	ər	240.111	No Fe	/er	lever c	Tota	I	102
102		below: Treatment Quinine		Feve	er	102	No Fev 792	/er	level c	Total	102	102
102		below: Treatment Quinine No Quonine		Feve 20 220	er)	102	No Fev 792 2216	/er	level c	Total 812 2436	102	102
102		below: Treatment Quinine No Quonine Total)	Feve 20 220 240	er))	102	No Fev 792 2216 3008	/er	evel c	Total	102	102
102		below: Treatment Quinine No Quonine)	Feve 20 220 240	er))	102	No Fev 792 2216 3008	/er	level c	Total 812 2436	102	102
10: Q7		Treatment Quinine No Quonine Total Discuss the use The following	fulness of	Feve 20 220 240 of quinin	er)) e in che	ecking the	No Fev 792 2216 3008 malaria	/er		Total 812 2436 3248	102	(10)
		Treatment Quinine No Quonine Total Discuss the use	fulness of	Feve 20 220 240 of quinin	er)) e in che	ecking the	No Fev 792 2216 3008 malaria	/er		Total 812 2436 3248	102	
Q7		Treatment Quinine No Quonine Total Discuss the use The following coefficient(y) of	fulness of are measuring for a second for a	Feve 20 220 240 of quinin easurem	er in che nents of	ecking i	No Fevente Property P	ver S S S velocity(gine:	(x) and	Total 812 2436 3248 d eva	l 102 5 6 7	(10)
Q7		Treatment Quinine No Quonine Total Discuss the use The following coefficient(y) of X cm/sec 20 Y 0.1	fulness of are me burning f	Feve 20 220 240 of quinin easurem	er in che nents of	ecking i	No Fevente Property P	ver S S S velocity(gine:	(x) and	Total 812 2436 3248 d eva	l 102 5 6 7	(10)
Q7		Treatment Quinine No Quonine Total Discuss the use The following coefficient(y) of X cm/sec 20	fulness of are measuring for a second for a	Feve 220 240 of quinin easurem uel drop	e in che	ecking in the an important the second three	No Fever 792 2216 3008 malaria air vulse engle 220	ver S S velocity(gine: 26002	(x) and	Total 812 2436 3248 d eva	poration	(10)
Q7		Treatment Quinine No Quonine Total Discuss the use The following coefficient(y) of X cm/sec 20 Y 0.1 mm²/sec	fulness of are me burning f 60	Feve 20 240 240 of quinin easurem uel drop 12100	e in che nents o lets in 140 0.78	ecking the an important 180	No Fever 792 2216 3008 malaria air vulse eng 220 0.75	/er 6 8 7 8 7 8 7 8 8 7 8 9 9 9 9 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1	(x) and 300	Total 812 2436 3248 d eva	poration	(10)
Q7		Treatment Quinine No Quonine Total Discuss the use The following coefficient(y) of X cm/sec 20 Y 0.1 mm²/sec 0.1	fulness of are me burning f 60 8 0.37	Feve 20 240 240 of quinin easurem uel drop 100 0.35	e in chece i	ecking the an important 180	No Fever 792 2216 3008 malaria air vulse eng 220 0.75	/er 6 8 7 8 7 8 7 8 8 7 8 9 9 9 9 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1	(x) and 300	Total 812 2436 3248 d eva	poration	(10)
Q7		Treatment Quinine No Quonine Total Discuss the use The following coefficient(y) of X cm/sec 20 Y 0.1 mm²/sec (a)Fit a straight (b)Find regressi	fulness of are metaburning for 60 8 0.37	Feve 20 240 of quinin easurem uel drop 12100 0.35	e in checents of the colets in 140 0.78 ca by the on Y.	ecking in the an important important in the anti-portant important in the anti-portant	No Fever 792 2216 3008 malaria air vulse engle 220 0.75	relocity(gine: 260 ₀₂ 1.18	(x) and 300 1.36 ares.	Total 812 2436 3248 d eval 340	poration	(10)
Q7		Treatment Quinine No Quonine Total Discuss the use The following coefficient(y) of X cm/sec 20 Y 0.1 mm²/sec 0.1	fulness of the following follows are measuring follows are measured for the follows are measured for th	Feve 20 240 of quinin easurem uel drop 12100 0.35	e in checolets in 140 0.78 ca by the on Y.	ecking of the an important 180 0.56 e method	No Fever 792 2216 3008 malaria air vulse engle 220 0.75 od of lease Air verse Air vers	ver velocity(gine: 260,2 1.18 ast squ	(x) and 300 1.36 ares.	Total 812 2436 3248 d eval 340 1.17	poration 1.65	(10)
Q7		Treatment Quinine No Quonine Total Discuss the use The following coefficient(y) of X cm/sec 20 Y 0.1 mm²/sec (a)Fit a straight (b)Find regressi (c)Estimate the (d)What should	fulness of the following f	Fever 20 220 240 of quinin easurem 100 0.35 ese data ion of X ion coef coefected	e in che nents of olets in 140 0.78 a by the on Y. fficient welcomes	ecking of the an important 180 0.56 e method	No Fever 792 2216 3008 malaria air vulse engle 220 0.75 od of lease Air verse Air vers	ver velocity(gine: 260,2 1.18 ast squ	(x) and 300 1.36 ares.	Total 812 2436 3248 d eval 340 1.17	poration 1.65	(10) 102
Q7	2	Treatment Quinine No Quonine Total Discuss the use The following coefficient(y) of X cm/sec 20 Y 0.1 mm²/sec (a)Fit a straight (b)Find regressi (c)Estimate the (d)What should Write short ans	fulness of the following of the followin	Fever 20 220 240 of quinin easurem fuel drop 0.35 ese dat ion of X ion coef x pected any TW	e in checolets in 140 0.78 0.78	ecking of the an important	No Fever 792 2216 3008 malaria air vulse engle 220 0.75 od of lease Air verse Air vers	ver velocity(gine: 260,2 1.18 ast squ	(x) and 300 1.36 ares.	Total 812 2436 3248 d eval 340 1.17	poration 1.65	(10)
Q7	a)	Treatment Quinine No Quonine Total Discuss the use The following coefficient(y) of X cm/sec 20 Y 0.1 mm²/sec (a)Fit a straight (b)Find regressi (c)Estimate the (d)What should Write short ans Joint Probability	fulness of are mediurning for 60 8 0.37 line to the exaporate between on a distribut	Fever 20 220 240 of quinin easurem fuel drop 0.35 ese dat ion of X ion coef x pected any TW	e in checolets in 140 0.78 0.78	ecking of the an important	No Fever 792 2216 3008 malaria air vulse engle 220 0.75 od of lease Air verse Air vers	ver velocity(gine: 260,2 1.18 ast squ	(x) and 300 1.36 ares.	Total 812 2436 3248 d eval 340 1.17	poration 1.65	(10) 102
Q7	2	Treatment Quinine No Quonine Total Discuss the use The following coefficient(y) of X cm/sec 20 Y 0.1 mm²/sec (a)Fit a straight (b)Find regressi (c)Estimate the (d)What should Write short ans	fulness of are mediurning for 60 8 0.37 line to the exaporate between on a distribut	Fever 20 220 240 of quinin easurem fuel drop 0.35 ese dat ion of X ion coef x pected any TW	e in checolets in 140 0.78 0.78	ecking of the an important	No Fever 792 2216 3008 malaria air vulse engle 220 0.75 od of lease Air verse Air vers	ver velocity(gine: 260,2 1.18 ast squ	(x) and 300 1.36 ares.	Total 812 2436 3248 d eval 340 1.17	poration 1.65	(10) 102
Q7	a)	Treatment Quinine No Quonine Total Discuss the use The following coefficient(y) of X cm/sec 20 Y 0.1 mm²/sec (a)Fit a straight (b)Find regressi (c)Estimate the (d)What should Write short ans Joint Probability	fulness of are mediuming for a for a formal formal for a formal formal for a formal formal for a formal formal for a formal formal for a formal for	Feve 20 240 240 of quinin easurem uel drop 12100 0.35 nese data ion of X ion coef expected	e in che nents of olets in 140 0.78 a by the on Y. fficient wair velocity proper	ecking of the an important	No Fever 792 2216 3008 malaria air vulse engle 220 0.75 od of lease Air verse Air vers	ver velocity(gine: 260,2 1.18 ast squ	(x) and 300 1.36 ares.	Total 812 2436 3248 d eval 340 1.17	poration 1.65	(10) 102

Statistical Quality Control 02