F 47 7		LEGE (A	AUTON	OMOUS	S), CH	ENNA	[ – 600	034	
110 2000	B.A.	DEGREE	E EXAMI	NATION	– ECOI	OMICS	5		
SECOND SEMESTER – APRIL 2014									
ST	2103 - 8						MICS		
Date : 07/04/20 Time : 09:00-12		Dept. N	lo.			] Max	x. : 100 M	Marks	
			SECTIO	DN- A					
Answer ALL the follo	wing:						(2	X 10 = 20)	
	0						(	)	
1) State any two uses of 2) Montion any two true true									
<ul><li>2) Mention any two typ</li><li>3) What are the types of</li></ul>		•	od of data	collection	9				
4) What are the method			ou or uata	concention	-				
5) Mention any two me	1	0							
6) Calculate range and			following	data:					
Marks	10-20	20-30	30-40	40-50	50-60				
No. of students	3	5	6	2	1				
<ul><li>7) Define Skewness.</li><li>8) Give the correlation</li></ul>	agafficiant	hatwaan	VandV						
9) Define time series.	coefficient	. Detween 2	vallu I.						
10) Mention any two u	ses of inde	x numbers							
Answer any FIVE of	the followi	ng:	SECTIO				(	5 X 8 = 40)	
	the followi	ng:	SECTIO				(	5 X 8 = 40)	
Answer any FIVE of	<b>the followi</b>	<b>ng:</b> portance of	<b>SECTIO</b> f Statistics	in detail.			(	5 X 8 = 40)	
Answer any FIVE of 11) Explain the function 12) Explain the methon 13) Draw a histogram	the followi ons and imj d of sampli and freque	ng: portance of ing with a s ncy polygo	SECTIC f Statistics suitable ex on diagram	in detail. ample.	-			5 X 8 = 40)	
Answer any FIVE of 11) Explain the function 12) Explain the metho 13) Draw a histogram between the ages 1	the followi ons and imp d of sampli and freque 5 and 45 in	ng: portance of ing with a ncy polygo n a society	SECTIC f Statistics suitable ex on diagram is given in	in detail. ample. for the pe	ving table	e:	e males	5 X 8 = 40)	
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Advertising expenditure	15	20	21	23	25	18 2	20	22	24	
7) For the f	followir	ng data, c	onstruct o	consumer'	s price ind	ex number	rs by:			I
					Family bu					
				2008		2010				
Co	mmodit	y	Quanitiy I		Price	e Price				
	Α		20		100	120				
	В		10		80	75				
	С		15		125	130				
	D		8		80	120				
8) Given b		e the amo	-	1	· · · · · ·					
	Years		2005		2007 200			2011		
	Produ		40	45	46 42		50	46		
Fit a str	aight lii	ne trend b	by the leas	st squares	and tabula	te the tren	d values.			
			•	-						
			-							
			-		ECTION -					
	TWO									10 - 40
Answer any	TWO								2 X 2	20 = 40)
		of the fol	lowing:	SI	ECTION -	· C		(		,
9) (i) Desci	ribe abo	of the fol out the va	lowing: rious met	<b>SI</b> hods of d	ECTION -	· C		(		,
9) (i) Desci	ribe abo	of the fol out the va	lowing:	<b>SI</b> hods of d	ECTION -	· C		(		,
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9) (i) Descr (ii) Find	ribe abo the mo	of the fol out the va	lowing: rious met	<b>SI</b> hods of d	ECTION -	· C		(	tation	,
9) (i) Descr (ii) Find	ribe abo the mo	of the fol out the va de for the	lowing: rious met e followir 15-25	SI hods of data:	agrammat	• C ic and graj 45-55	bhical rep 55-65	( presen 65- 3	.75 3	of data.
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9) (i) Descr (ii) Find Cla Free	ribe abc the mo ss quency	of the folout the value for the $5-15$	lowing: rious met followin 15-25 2	SI hods of day ag data: 25-35 5	agrammat	- C ic and graj 45-55 7	ohical rep 55-65 4	( presen 65- 3 (	75 3 10+10	of data.
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21) (i) Calculate Karl Pearson's coefficient of skewness for the following data:

Х	3	4	5	6	7	8	9	10
F	7	10	14	35	102	136	43	8

(ii) Find the Spearman's rank correlation coefficient for the data given below:

Х	48	33	40	9	16	16	65	24	16	57
Y	13	13	24	6	15	4	20	9	6	19
	(10+10)									

22) (i) Explain the four components of time series analysis.

(8 + 12)

(ii) For the following data, calculate price index numbers by:

(a) Laspeyre's method, (ii) Paasche's method and (c) Fisher's ideal method and test whether it satisfies the time reversal test.

	Base	year	Current year		
Commodity	Price	Quantity	Price	Quantity	
Wheat	8	50	20	60	
Ghee	2	15	6	10	
Gas cylinder	300	5	320	9	
Sugar	2	10	5	8	
Cloth	1	40	3	30	