PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS) BA DEGREE EXAMINATION MAY 2017 (Third Semester)

Branch-ECONOMICS

STATISTICAL METHODS - I

Time : Three Hours

Maximum : 75 Marks

(10x2 = 20)

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SECTION-A (20 Marks) Answer ALL questions ALL questions carry EQUAL marks

Define the following:

- 1 Statistics
- 2 Primary data.
- 3 Classification.
- 4 Frequency Polygon.
- 5 Mean Deviation.
- 6 Lorenz Curve.
- 7 -Skewness.
- 8 Kurtosis.
- 9 Correlation.
- 10 Regression.

$\frac{\text{SECTION - B (25 Marks)}}{\text{Answer ALL Questions}}$ ALL Questions Carry EQUAL Marks (5x5 = 25)

11 a Briefly explain the various methods of collecting primary data.

.OR

b State the various methods of non-probability sampling.

12 a What are the general rules for constructing a diagram?

OR

b Explain the various types of tables.

13 a What are the merits and demerits of arithmetic mean?

OR

OR

b Calculate standard deviation for the following data.

Class interval:	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45
Frequency:	6	'5	15	10	5	4	3	2

14 a Explain the meaning of moment.-

b Find the Karl Pearson's Coefficient of Skewness from the data given below:

Size:	3	4	5	6	7	8	9	' 10
Frequency:	7	10	14	35	102	136	43	8

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15 a What are the types of Correlation?												
OR												
b Compute the regression equation of Y on X from the following data: X_1 A_2 A_3 A_4 A_4 A_4 A_4 A_5 A_4 A_5 A_4 A_5												
	X: Y:		46 40	42 38	,44 36		40 85	43 39		41 37	45 41	
Y: 40 38 36 '35 39 37 41												
<u>SECTION - C (30 Marks)</u>												
Answer any THREE Questions ALL Questions Carry EQUAL Marks (3 x 10 =• 30)												
16 Discuss the limitations of Statistics. $(3 \times 10 = 30)$												
17	Explai	n the	various	types of	of class	ificatio	n.					
18	The So	cores	of two ł	patsmei	n A and	l B in te	en innin	igs dur	ing a	certain	seaso	n are:
	А	32	28	47	63	71	39	10	60	96	14	
	В	19	31	48	53	67	90	10	62	40	80	
Find Cusing coefficient of variation which of the two batsmen A,B- is more consistent in scoring.												
. 19 Ca	lculate P	earson	n's Coe	fficient	t of Ske	wness	for the	follow	ing da	ita:		
. 19 Calculate Pearson's Coefficient of Skewness for the following data: Wages (Rs.): 10-15 15-20 20-25 25-30 30-35, 35-40 40-45 45-50												
	No. of W	orker	s:	8	16	30	45	62		32	15	6
20 Calculate the Karl Pearson's Co-efficient of Correlation for the following data:												
	X:	46	33	41	38	36	45	34	2	37	50	40
	Y:	12	13	24	16	15	14	21		17	19 -	19
	Z-Z-Z							I	END			