

M.A. DEGREE EXAMINATIONS - APRIL 2017
II SEMESTER
ECONOMICS
PAPER V- STATISTICAL METHODS IN ECONOMICS
 (No additional sheet will be supplied)

Time: 3 Hours

Max.Marks.75

PART-A

5 x 3 = 15 Marks

Answer any FIVE questions.
 Each question carries Three (3) marks.
 Each answer should not exceed One (1) page.

1. What are the functions of averages?
2. What are the uses of dispersion?
3. What purpose is being served by correlation?
4. What are the assumptions made in a linear regression?
5. Explain conditional probability.
6. Distinguish between complete enumeration and sampling study.
7. Define null and alternative hypothesis.
8. What do you understand by the test of goodness of fit?

PART-B

4 x 15 = 60 Marks

Answer ALL questions.
 Each question carries Fifteen (15) marks.
 Each answer should not exceed Six (6) pages.

- 9 (a) The arithmetic mean of two members is 10 and their geometric mean is 8. Find the numbers.
 (b) Define harmonic mean and give the formula for harmonic mean of n Observations.
 (OR)
- 10 (a) Define and discuss about variance
 (b) Give different formulae for measuring skewness (α_3)
11. Find the correlation coefficient between the marks obtained by ten students in economics and statistics

Marks (Economics)	70	68	67	55	60	60	75	63	60	72
Marks (Statistics)	65	65	80	60	68	58	75	62	60	70

(OR)

12. For the following lines of regression find the mean values of X and Y and the two regression coefficients
 $8X - 10Y + 66 = 0$
 $40X - 18Y = 214$

[P.T.O]

13. In an examination, a student is considered to have failed, secured grade 'C', grade 'B' and grade 'A', according as he scores less than 45%, between 45% and 60%, between 60% and 75% and above 75% respectively. In a particular year 10% of students failed in the examination and 5% students got 'A' grade. Assuming the marks to be normally distributed, find the percentage of students who get grade 'B' and second class 'C' respectively.

(OR)

14 a) What are the limitations of sampling? and State the principles of sampling.

b) What are probability and non-probability sampling?

15. The procedure of testing hypothesis requires a researcher to adopt several steps. Describe in all such steps.

(OR)

16. The following figures show the distribution of digits in number chosen at random from a telephone directory:

digit	0	1	2	3	4	5	6	7	8	9	Total
frequency	1026	1107	997	966	1075	933	1107	972	964	853	10,000

Test whether the digits may be taken to occur equally frequently in the distribution.

