# M. PHIL DEGREE END SEMESTER EXAMINATION - MARCH 2018

SEMESTER – 1: M.PHIL IN COMMERCE

# COURSE: 15MP1COMT2: QUANTITATIVE TECHNIQUES

(For Regular - 2017 Admission)

Time: Three Hours

Max. Marks: 75

## **SECTION A**

Answer any Eleven questions, each question carries 5 marks

- 1. Explain the functions of statistics.
- 2. What do you mean by measures of central tendencies?
- 3. Explain the procedure for testing of hypothesis
- 4. What are the advantages of non-parametric test?
- 5. Explain the uses of regression analysis
- 6. What is standard error? Explain its utility.
- 7. What is sampling distribution? Explain the commonly used sampling distributions.
- 8. What is Central Limit Theorem?
- 9. State the applications of chi square test.
- 10. State the requisites of a good measure of average.
- 11. State the mathematical properties of standard deviation.
- 12. What is F test? When is it used?
- 13. What is mean deviation? Explain its merits and demerits
- 14. What is SPSS? State the capabilities of SPSS in data analysis. (5 x 11 = 55)

### **SECTION B**

### Answer any Two questions, each question carries 10 marks

15. Calculate Karl Pearson's coefficient of correlation

Х	78	89	99	60	59	78	68	61
Y	125	137	156	112	107	132	123	108

16. Obtain regression equation Y on X and estimate Y when X=55 from the following

Х	40	50	38	60	65	50	35
Y	38	60	55	70	60	48	30

Plot	Varieties					
	А	В	С	D		
Ι	99	103	109	104		
II	101	102	103	100		
III	103	100	107	103		
IV	99	105	97	107		
V	98	95	99	106		

17. The following data relate to the yield of four varieties of wheat each sown, on five plots find whether there is a significant difference between the mean yield of these varieties.

18. From the following details find out whether there is any association between passing the examination and studying in the day classes

Nature of Class	Result				
Nature of Class	Passed	Failed			
Day Classes	10	20			
Evening Classes	4	66			

(10 x 2 = 20)

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