

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Hons.) Horticulture

Semester : I (New)	Term : I	Academic Year : 2019-20
Course No. : H/STAT 111	Title : Elementary Statistics and Computer Application	
Credits : 3(2+1)	Time : 10.00 to 13.00	Total Marks : 80
Day & Date : Monday, 06.01.2020		

- Note : 1. Solve ANY EIGHT questions from SECTION "A".
2. All questions from SECTION "B" are compulsory.
3. All questions carry equal marks.
4. Draw neat diagrams wherever necessary.

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SECTION "A"

- Q.1 a) Define probability. State multiplication theorem of probability. State the properties of normal probability distribution.
b) Give probability mass function of Poisson's distribution and Binomial distribution (with specifications of terms used).
- Q.2 a) Enlist basic principles and basic designs in Experimental designs. Explain in detail any two basic principles.
b) Prepare Layout of factorial experiment with two factors A and B having levels three and four respectively (Consider two replications).
- Q.3 a) What do you mean by measures of central tendency (measures of location)? What are the characteristics of ideal measures of central tendency?
b) Define Median and Mode. Explain method of calculating these two measures for continuous frequency distribution.
- Q.4 a) What do you mean by correlation? Discuss the method of studying correlation by using 'scatter diagram'.
b) Differentiate between correlation and regression. Write t-statistic for testing population correlation coefficient (ρ_{XY}) and population regression coefficient (β_1).
- Q.5 Describe computer memory, types of memory with example.
- Q.6 a) State five different steps followed in testing a hypothesis. What is Type I error and Type II error?
b) Write null hypothesis, alternative hypothesis and t-statistic for testing i) mean of single population ii) means of two independent populations (with specifications of terms used).
- Q.7 Write short notes. (Any Four)
a) χ^2 test for the 2 x 2 contingency table
b) Frequency polygon
c) Simple Random Sampling
d) Simple linear regression line or equation of Y on X
e) Web browser with suitable example
f) Diagram of personal Computer

(P.T.O.)

