Roll No. | | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 09

B.Sc.(Agriculture) (2014 to 2018) (Sem.–4)

BASIC STATISTICS

Subject Code : BSAG-409

M.Code : 72761

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

Q1. Write briefly :

a) Coefficient of Variation (C.V.)

b) Poisson Distribution

c) Median

d) Assumptions of linear regression

e) Mutually Exclusive Events

f) Non-Probability sampling

g) Degrees of freedom

h) Standard Error

i) Skewness and Kurtosis

j) Alternative Hypothesis

SECTION-B

2. A bag contains 5 white and 8 red balls. Two drawings of 3 balls are made such that (a) the balls are replaced before the second trial, and (b) the balls are not replaced before the second trial. Find the probability that the first drawing will give 3 white and second 3rd balls in each case.

3. Daily income of ten families of a particular place is given below : Find geometric mean and Harmonic mean from the following data?

   85, 70, 15, 75, 500, 8, 45, 250, 40, 36

4. Calculate coefficient of correlation by Karl Pearson's method and its testing from the following data ?

X	6	2	10	4	8
Y	9	11	6	8	7

5. Explain briefly the assumptions required to test the equality of two means. Blood pressure (diastole) are taken on 6 men before and after a full mean and the results are given below (mm)

BP Before meal	121	119	124	122	123	120
BP After meal	124	122	124	125	127	123

   Can it be concluded that blood pressure (diastole) increase average after the intake of full meal?

6. Define probability. Explain the additive and multiplicative laws of Probability?

SECTION-C

7. An experiment was conducted using Nitrogen (N) and Phosphorous (P). The yields recorded from each plot are given below. Each treatment combination was applied in two plots. Analyze the data.

	Nitrogen			
Phosphorous	**N_1**	**N_2**	**N_3**	**N_4**
P_0	30,34	35,37	38,36	32,34
P_1	32,35	34,38	36,38	32,38
P_2	42,40	38,42	40,42	38,40

8. For the following data an fertilizer (X) and yield (Y)

Fertilizer (X)	20	35	40	45	50	55	60	65	70
Yield (Y)	40	100	128	145	160	170	160	150	140

   Fit function $Y = b_0 + b_1X_1 + U$

9. Define statistics? How it relates with other sciences?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.