

Seat No. : _____

MG-108

May-2018

B.Sc., Sem.-IV

CC-205 : Statistics

(Statistics Tests, Official Statistics of Sampling)

Time : 3 Hours]

[Max. Marks : 70

- Instructions :**
- (1) Attempt **all** questions.
 - (2) **All** questions carry equal marks.
 - (3) Scientific calculator is allowed to use.
 - (4) Statistical tables will be supplied on request.

1. (a) Explain the concept of Statistical hypothesis in detail. 7

OR

Give the procedure for testing the significance of difference between two means based on large sample.

- (b) Write note on Fisher's information and its use to test the significance of co-efficient of correlation. 7

OR

What do you mean by test of proportions ? Explain the procedure to test the significance of difference between two proportions based on large sample.

2. (a) Derive the equation of plane of regression for three variables. 7

OR

Write a note on variance of Residuals.

- (b) State and prove properties of Residuals. 7

OR

Write note on co-efficient of multiple correlation and state its properties.

3. (a) Explain the role of Indian census operation in planning and development processes. 7

OR

Write a short note on NSSO.

(b) Explain the meaning, origin, purpose and function of the CSO and ICMR. 7

OR

Write a detail note on Indian Statistical Institute (ISI).

4. (a) Explain principal steps in sample survey. 7

OR

Write advantages and disadvantages of sampling.

(b) What are non-sampling errors ? What are the factors arise from non-sampling error ? 7

OR

Give difference between survey and census method. Write importance of survey.

5. Write answers in brief : 14

(1) Define simple and composite hypothesis.

(2) Define critical region.

(3) Define partial correlation co-efficient.

(4) State full form of CSO and ICMR.

(5) Define probability sampling.

(6) Define judgement sampling.

(7) Define sampling errors.
