# W-417(A)/W-418(A)

## B.Sc. (Third Year) Examination, (Second Chance) March/April-2020
### STATISTICS
#### Paper - I & II

### Applied Statistics / SQC and Design of Experiments

*Time : Three Hours*

*Maximum Marks : 40+40=80 (For Regular Students)*      *Minimum Pass Marks : 33%*

*Maximum Marks : 50+50=100 (For Private Students)*      *Minimum Pass Marks : 33%*

**Note :** Attempt **all** questions.

### Section-A

Q.1.  Describe Crude Death Rate (CDR) and Standard Death Rate (SDR) with examples.     13/16

Q.2.  Describe Age specific birth rate and general fertility rate also write merits and demerits.

13/17

Q.3.  Construct index number by using Fisher's ideal formula and show how it satisfies factor reversal test from the data given below.     14/17

| Commodity | Value (Rs) | | Base Year | Current Year |
| --- | --- | --- | --- | --- |
| | Base year | Current year | Quantity | Price |
| A | 300 | 560 | 50 | 10 |
| B | 200 | 240 | 100 | 2 |
| C | 240 | 360 | 60 | 6 |
| D | 300 | 288 | 30 | 12 |
| E | 320 | 432 | 40 | 12 |

### Section-B

Q.4.  Explain derive the statistical analysis of the one-way classification.     13/16

Q.5.  Define the following terms :     13/17
   i)   Principle of an experimental design.
   ii)  Local control

Q.6.  Define the following terms :     14/17
   i)   Layout of Design
   ii)  Advantage of Latin $sq^2$ design.