

## SUMMARY OF PROJECT REPORT

**B.Sc (Hons), Semester-V, Practical Examination-2021  
Paper- GEOA-A-CC-5-11-P**

**Title of the Project: A Geographical Study of COVID-19 in West Bengal, India**

**Place of Work: Online mode due to pandemic (As per C. U. guidelines)**

**Duration of Project Work: 10-12-21 to 24-12-21**

**List of Students: Annexure-I**

**Number of Students Eligible for Submission: 46**

**Number of Students Project Submitted: 46**

**Submission Date: 20.01.22**

**Project Report Submitted By the Students: Annexure-II**

### **Objective of the Project**

It is a general observation that the disease has travelled from Wuhan, China to all over the globe and that every 1st case of COVID-19 infection in any country is found in a city. Similarly, for West Bengal, the first COVID-19 case was recorded in the state capital Kolkata. Therefore, this report would like to set its hypothesis and research questions.

- Kolkata (big city) is the main source point of the disease. We can assume that with increasing distance from Kolkata, the burden of the disease will be reduced.
- Population density plays an important role in localization of COVID-19 patients. We understand that the disease is (highly) infectious. It was thought that higher population density would increase the risk of transmission. This is also true that the population density is directly related with the level of urbanization. So, population density and level of urbanization have direct relationship with COVID-19 cases and death.
- Forest cover influences number of COVID-19 cases—is another hypothesis of the present study. We all know that the presence of a forest always supplies fresh air and reduces the burden of air pollution. Fresh air may reduce the burden of COVID-19 cases as well.
- Non-working population is at a much higher risk of contacting Corona virus infection. It is well known that the COVID-19 related lockdown jeopardizes the livelihood of millions. The non-working population would be at the higher level of vulnerability to Corona virus infection as they would prefer to get food than get the objects necessary for prevention measures (sanitizer, soap, mask etc.). The non-working population may be considered as proxy to economically poor people.
- People having concrete households would have lower COVID-19 cases. The fundamental assumption is that the people living in the concrete households are richer. They would have higher purchasing power and would be able to take better prevention measures from Corona virus.

## **Outcome of the Project**

Spatial distribution of COVID-19 cases is strongly uneven in West Bengal. Kolkata is clearly the main source point of the disease in West Bengal. 1st COVID-19 case started from Kolkata and the maximum number of patients and deaths until date are recorded here. We can say that the burden of the COVID-19 diseases is much higher in the big city, Kolkata. Correlation coefficient of various factors with COVID-19 cases and deaths has revealed that 'level of urbanization', 'population density', 'concrete roof', and 'distance from big city (Kolkata)' are important factors in the nature and extent of spread of COVID-19 cases and related deaths. We could understand that the cities are most vulnerable locations for Corona virus infection. Detailed study is necessary for understanding micro level variations within the city space to evaluate the role of urban pattern, urban space, and urban morphology on Corona virus infection. The preventive measure 'Lockdown' or 'quarantine' makes every possible economic activity stopped. Therefore, we apprehended that the poor people would be vulnerable to this disease. The most important and surprising result is the good housing condition and COVID-19 cases and deaths are positively related. The main sources of urban poor or labour forces are the 'migratory labors' from the rural part. The pandemic resulted in a very large-scale counter migration to rural areas from the urban centers. It was thought that the rural areas would be worst hit by the COVID-19 cases. However, the data does not reveal that. Therefore, the future research question arises here on possible sources of immunity from Corona virus infection to the poor and rural people. Although the percentage of forest cover has not played any statistically significant role, we should not ignore the basic science that trees are the major absorbent of air pollutants and make air fresh. Human interference in the forest area may be responsible for the emergence of such kinds of diseases. Therefore, proper care and research should be conducted on the role of fresh air and forest to COVID-19 cases. Finally, the report would like to conclude that there is sufficient scope to have faith in humanity for survival from this virus. In addition, as under stressful situations, the immune system of human beings is compromised and they become more prone to infections. Yoga based lifestyle (the concept derived from Indian ancient scriptures) can reduce psychological stress, which may have an important role to strengthen the immune system that can prevent associated complications.

# LALBABA COLLEGE

NAAC ACCREDITED B- DEGREE COLLEGE

DEPARTMENT OF GEOGRAPHY

(Affiliated to the University of Calcutta)

ESTD. - 1964



Ref. No. ....

Date.....201

## COMPLETION CERTIFICATE

Certify that the field report titled "A Geographical Study of COVID 19 in West Bengal, India" submitted by B.Sc. (H) SEM- V (46 students) in partial fulfillment of the requirements for Paper-GEOA-A-CC-5-11-P of the Geography Practical Examination- 2021 under the curriculum of the University of Calcutta is the record of field work (secondary data) carried out by them during the time from 10.12.21 to 24.12.21.

Additionally, they have met all requirements set forth by the University of Calcutta for the purpose of the undergrad field work in geography.

.....  
(Dr. Ansar Khan)

Assistant Professor  
Department of Geography  
Lalbaba College, Howrah

.....  
(Dr. Sanjay Kumar)

Principal  
Lalbaba College, Howrah

Address : 117, G. T. Road, P.O. Belurmath, Dist. Howrah, West Bengal, PIN - 711202

Website : [www.lalbabacollege.net](http://www.lalbabacollege.net) E-mail : [lbcgeography@gmail.com](mailto:lbcgeography@gmail.com)

☎ . Office : (033) 2654-6289-213

**Annexure-I**  
**List of Eligible Students**  
**GEOA Semester-V (Session: 2021-22)**  
**Project Title: A Geographical Study of COVID-19 in West Bengal, India**

SL. NO	NAME OF STUDENTS	CU ROLL NUMBER
1	SANGITA GANGULY	193431-11-0002
2	ANINDITA BANERJEE	193431-11-0003
3	SUMANA KANRAR	193431-11-0004
4	SILPITA GHOSH	193431-11-0005
5	MOUSUMI MAJHI	193431-11-0006
6	TITHIPARNA SHEE	193431-11-0007
7	ARPITA GHOSH	193431-11-0008
8	SUMITA PUAL	193431-11-0009
9	NISHA MANNA	193431-11-0010
10	DIPANNITA MONDAL	193431-11-0011
11	ANWESHA BANERJEE	193431-11-0013
12	RUPSA KOLEY	193431-11-0014
13	SHREYA BANERJEE	193431-11-0015
14	SAHELI DAS	193431-11-0016
15	ANJALI DHARA	193431-11-0017
16	ANUSHKA PAL	193431-11-0018
17	DIPANWITA PATRA	193431-11-0019
18	SHREYASI CHOWDHURY	193431-11-0020
19	PIYALI MAJUMDER	193431-11-0021
20	SHRISTY KARMOKAR	193431-11-0022
21	MUKTA MADHU	193431-11-0023
22	DIPANA PAUL	193431-11-0024
23	SUSMITA DEY	193431-11-0026
24	PRITI ADAK	193431-11-0027
25	ARITRI ROY	193431-11-0028
26	SUROCHITA KARAK	193431-11-0029
27	MANDIRA BISWAS	193431-11-0030
28	PRIYASAMADDAR	193431-11-0031
29	SOUMI BISWAS	193431-11-0032
30	SANCHITA MONDAL	193431-11-0033
31	RIYA METE	193431-11-0034
32	RIYA RAJBANSHI	193431-11-0036
33	BITHIKA SHEE	193431-11-0037
34	TRISHNA BERA	193431-11-0038
35	SRABANTI NARU	193431-11-0039
36	SUDIPTA PAL	193431-11-0040
37	INDRAJIT MAJUMDAR	193431-21-0002
38	SUDIPI DAS	193431-21-0005
39	JAYANTA DAS	193431-21-0007
40	SUMAN PAUL	193431-21-0008
41	SHREYANS AGARWAL	193431-21-0009
42	JOY DAS	193431-21-0010
43	RASOMOY NASKAR	193431-21-0011
44	ROHIT KUNUI	193431-21-0013
45	SUVOJIT MAHISAL	193431-21-0015
46	NIRAJ SHAW	193431-21-0016

**Annexure-II**  
**List of Project Completed Students**  
**GEOA Semester-V (Session: 2021-22)**  
**Project Title: A Geographical Study of COVID-19 in West Bengal, India**

SL. NO	NAME OF STUDENTS	CU ROLL NUMBER
1	SANGITA GANGULY	193431-11-0002
2	ANINDITA BANERJEE	193431-11-0003
3	SUMANA KANRAR	193431-11-0004
4	SILPITA GHOSH	193431-11-0005
5	MOUSUMI MAJHI	193431-11-0006
6	TITHIPARNA SHEE	193431-11-0007
7	ARPITA GHOSH	193431-11-0008
8	SUMITA PUAL	193431-11-0009
9	NISHA MANNA	193431-11-0010
10	DIPANNITA MONDAL	193431-11-0011
11	ANWESHA BANERJEE	193431-11-0013
12	RUPSA KOLEY	193431-11-0014
13	SHREYA BANERJEE	193431-11-0015
14	SAHELI DAS	193431-11-0016
15	ANJALI DHARA	193431-11-0017
16	ANUSHKA PAL	193431-11-0018
17	DIPANWITA PATRA	193431-11-0019
18	SHREYASI CHOWDHURY	193431-11-0020
19	PIYALI MAJUMDER	193431-11-0021
20	SHRISTY KARMOKAR	193431-11-0022
21	MUKTA MADHU	193431-11-0023
22	DIPANA PAUL	193431-11-0024
23	SUSMITA DEY	193431-11-0026
24	PRITI ADAK	193431-11-0027
25	ARITRI ROY	193431-11-0028
26	SUROCHITA KARAK	193431-11-0029
27	MANDIRA BISWAS	193431-11-0030
28	PRIYASAMADDAR	193431-11-0031
29	SOUMI BISWAS	193431-11-0032
30	SANCHITA MONDAL	193431-11-0033
31	RIYA METE	193431-11-0034
32	RIYA RAJBANSHI	193431-11-0036
33	BITHIKA SHEE	193431-11-0037
34	TRISHNA BERA	193431-11-0038
35	SRABANTI NARU	193431-11-0039
36	SUDIPTA PAL	193431-11-0040
37	INDRAJIT MAJUMDAR	193431-21-0002
38	SUDIPI DAS	193431-21-0005
39	JAYANTA DAS	193431-21-0007
40	SUMAN PAUL	193431-21-0008
41	SHREYANS AGARWAL	193431-21-0009
42	JOY DAS	193431-21-0010
43	RASOMOY NASKAR	193431-21-0011
44	ROHIT KUNUI	193431-21-0013
45	SUVOJIT MAHISAL	193431-21-0015
46	NIRAJ SHAW	193431-21-0016